

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER FTC-0006/FS	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Test and Demonstration Report (Prototype High-Temperature Chlorine-Resistant RO Elements)		5. TYPE OF REPORT & PERIOD COVERED Phase I Test Report Aug 86-Mar 87
7. AUTHOR(s) Ralph H. Forester Michael Y. Kim Robert J. Petersen		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS FilmTec Corporation 7200 Ohms Lane Minneapolis, MN 55435		8. CONTRACT OR GRANT NUMBER(s) DAAK70-86-C-0081
11. CONTROLLING OFFICE NAME AND ADDRESS DCASMA, Twin Cities 2305 Ford Parkway St. Paul, MN 55116		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS Line Item A006
15. SECURITY CLASS. (of this report)		12. REPORT DATE 21 Sep 87
		13. NUMBER OF PAGES 15 pp + Appendix (82 pp)
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE

AD-A213 569

STRBE-FS: 8
STRBE-TQ: 2
AMSTR-WJ: 1
AMSTR-QEG: 1

17. DISTRIBUTION STATEMENT (Distribution Statement 1, 2, or 3, as indicated in Block 20, if different from Report)

Approved for public release
Distribution Unlimited

DTIC
ELECTE

OCT 23 1989

18. SUPPLEMENTARY NOTES

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

brackish water, chlorination, chlorine resistance, desalination membranes, reverse osmosis, seawater

20. ABSTRACT (Continue on reverse side if necessary and identify by block number)

Sixteen prototype spiral wound reverse osmosis elements were designed, fabricated, and subjected to an extensive Phase I test protocol for acceptance. These prototype elements contained a high rejection grade of FilmTec's FT30 membrane especially treated by a proprietary process to enhance its chlorine resistance. Spiral elements were additionally designed to operate at a feedwater temperature of 140°F. Flux and salt rejection of these elements averaged 2220 GPD and 99.0% on ASTM synthetic seawater at 800 psi and 25°C.

GENERAL REPORT SUMMARY SHEET

<p>1. COMPONENT, PART NAME PER GENERIC CODE</p> <p>Prototype Hi-Temp, Chlorine Resistant RO Element</p>	<p>2. PROGRAM OR WEAPON SYSTEM</p> <p>DAAK70-86-C-0081</p>	<p>1. <input type="checkbox"/> DAY <input type="checkbox"/> NIGHT <input type="checkbox"/> V.L.</p>
<p>4. ORIGINATOR'S REPORT TITLE</p> <p>Phase I Test Results on 18 Prototype RO Elements</p>	<p>3. ORIGINATOR'S REPORT NO.</p> <p>FTC-0005</p>	<p>TEST COMPL. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p> <p>REPT. COMPL. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/></p>
<p>5. TEST TYPE, ETC.</p> <p>Reverse Osmosis Test</p>		

7. THIS TEST (SUPERSEDES) (SUPPLEMENTS) REPORT NO:

8. OUTLINE, TABLE OF CONTENTS, SUMMARY, OR EQUIVALENT DESCRIPTION:

	<u>Page</u>
1. Purpose of the Test.....	1
2. Description of the Test Specimens.....	1
3. Description of the Test Apparatus.....	3
4. Test Procedure.....	5
5. List of the Test Requirements.....	6
6. Summation of Test Results.....	7
7. General Description of Phase I Events and Findings.....	11
8. Conclusions.....	15
9. Appendix A: Tabulated Test Data	

✓

per ltr

A-1

11. REC'D
8

<p>9. NAME</p>	<p>10. CONTRACTOR</p> <p>Filt-Tec Corp.</p>	<p>11. CONTRACT NO.</p>
----------------	---	-------------------------

TEST AND DEMONSTRATION REPORT

Phase I Test Results

PURPOSE OF THE TEST

The overall objective of this test is to generate reverse osmosis performance data documenting the performance of a new membrane element prototype designed for improved resistance and high temperature operating characteristics. The specific objective of this Phase I test is to provide baseline test data on these prototype elements under three feedwater test conditions (fresh water, brackish water, seawater). These baseline test data are to demonstrate minimum flux and chloride rejection characteristics as a basis for approval to conduct Phase II and III tests, as outlined in the subject contract.

Initially, the contract called for tests on 16 elements. During Phase I testing, the contract scope was changed to testing on 18 elements including three (instead of one) earmarked for Phase II chlorine tests.

DESCRIPTION OF TEST SPECIMENS

Test specimens are spiral wound reverse osmosis elements meeting dimensions and requirements as shown in the attached Drawing No. 20203. Because of some internal changes in these elements, they were designated as XP30HR-6040M prototypes. These prototype elements differ from standard SW30-6040M reverse osmosis elements in the following respects.

First, these elements have FilmTec's high rejection grade FT30 membrane contained therein, but this membrane has been treated by a proprietary process to enhance both flux and chlorine tolerance.

Second, these elements have a double layer of epoxy nylon tricot as permeate channel spacer for improved flow-carrying capacity under high temperature and high pressure. Standard reverse osmosis element designs have temperature limitations, with typical commercial operating limit of 45°C; and the permeate channel spacer of a standard element collapses at high pressure and high temperature conditions.

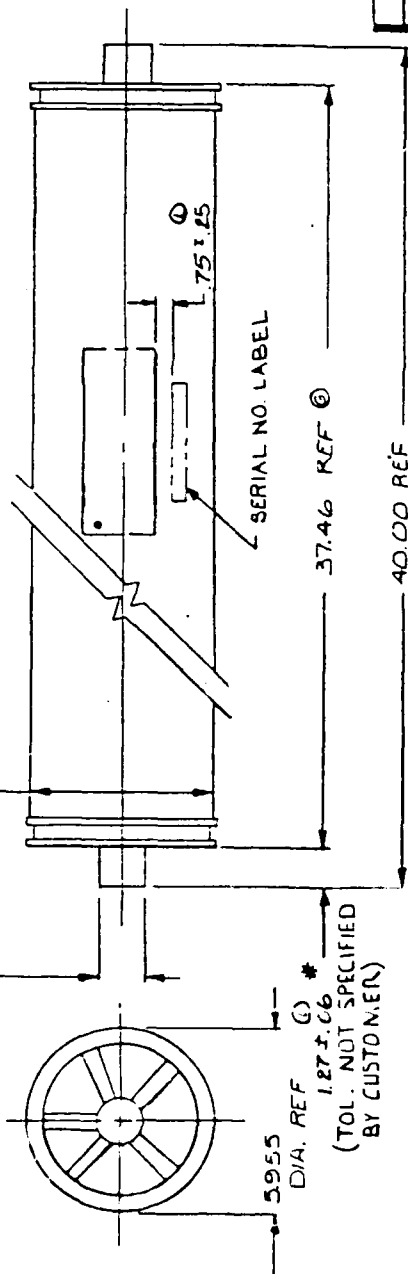
Third, to maintain sufficient active membrane area in the elements in view of the use of a thicker permeate channel construction, a thinner brine channel spacer was utilized. A ladder-type brine net, made by Conwed Corporation, was used as opposed to a diamond crosshatch brine net normally used in such elements.

NOTES

1. ALL DIMENSIONS ARE IN INCHES
2. DO NOT SCALE DRAWINGS
3. BREAK ALL SHARP EDGES
4. WILL FIT 6.0 ID VESSEL
5. USE PARKER 1810 SEAL #8410-0037 OR EQUIV.
6. THIS ASSY WILL USE EXTERNAL O-RINGS

1.498 B ± .003 DIA REF *

5.970 DIA. MAX. ①



REV	DATE	DESCRIPTION	98H	CHKD	AUTH
F	4-25-85	ECCO 1373			
G	4-28-85	ECCO 1427			
H	4-23-86	ECCO 1927			
J	6-17-84	ECCO 2016			
K	6-25-86	ECCO 2047			
L	8-20-86	ECCO 2129			
M	10-8-86	ECCO 2209			

20203

ITEM	PART NO	QTY	DESCRIPTION

FILMTEC CORPORATION
MINNEAPOLIS MINNESOTA 55436 USA

TOLERANCES	DATE	SCALE	NUMBER
X ± .000	6-27-85	1/4	20203
XX ± .030			
XXX ± .010			
Fraction ± 1/32			
CHECKED			
AUTHORIZED			

* CUSTOMER CONTROLLED FEATURE.

CUSTOMER NO. 00259

CUSTOMER DWG NO. 13226E2211 REV. 1

DESCRIPTION OF TEST APPARATUS

A special test bench was built for this test program. FilmTec drawing #3-0387, attached as Figure 1, is a diagram of this test bench. It was located in the R&D area of FilmTec, as opposed to the element production area. Hence, no interference by regular element production testing was experienced.

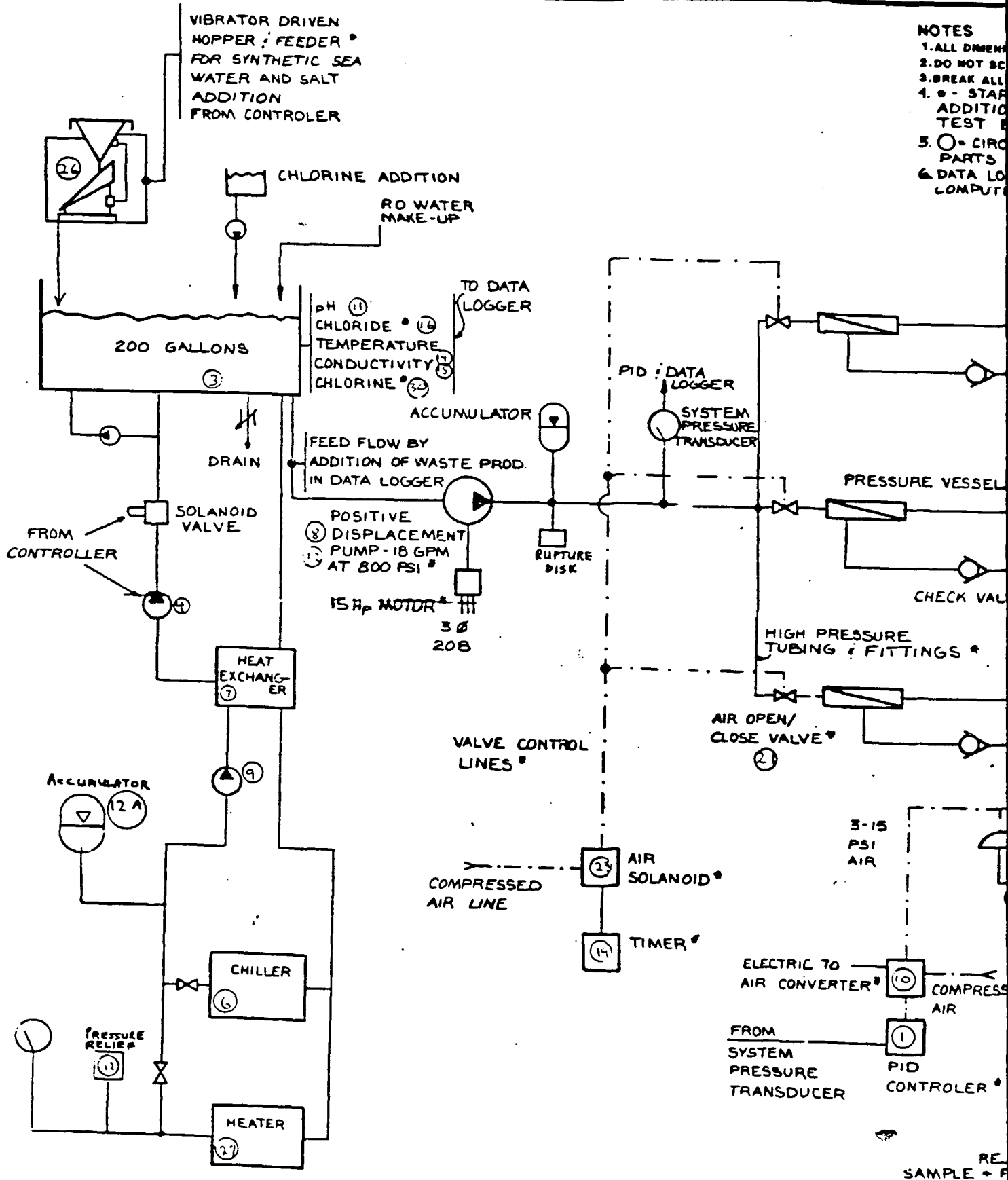
This test bench was designed for long-term, unattended operation. It was further designed to operate in the mode required to satisfy the test protocol, i.e., a single element is tested for eight hours followed by 16 hours off, followed by eight hours testing. To compress the overall time required for test program, the test system was equipped with three pressure vessels. A timer operated three high pressure valves (via an electric-to-air solenoid). The timer was preset to provide eight hours testing on one element, then a second and then a third, and then back to the first element, etc. This automatically provided the 16 hours "off" required between tests. Because the piping for both the permeate and reject flows connect together, check valves were installed to assure that only flows under test were entering the downstream portion of the system.

The pressure vessels themselves were specially designed to provide simple, but safe, element changeover and operation. They consisted of filament-wound tubes designed for the radial pressure load. The axial pressure was carried on pairs of stainless steel plates with end forks to hold in the end plugs.


Feed was supplied from a 200 gallon reservoir with a positive displacement pump of a wobble plate-diaphragm design that eliminates feed contamination from the pump drive mechanism - an important point when operating a closed loop system. The feed flow was dictated by the pump speed, which was set to provide 18 gpm.

The feed pressure was controlled using a pressure transducer to sense the pressure, a proportional integrating differentiating (PID) controller, an electric-to-air converter, and an air-regulated needle valve. This combination provided a feedback controlled loop and a precise, constant pressure. Temperature control was provided by a chiller (for maintaining 25°C) and heater (for future high temperature testing). Overpressure safety was provided on the high pressure side by a rupture disk. The low pressure return plumbing was protected by a high pressure cut-out switch.

Ports were provided for checking on-line sensor calibration. The system was provided with a variety of other sensors to collect the data required. These included platinum resistance temperature sensors, pressure transducers, probes and meters for chloride ion concentration, pH, conductivity, flow and chlorine. These (analog) signals all went to a 32-channel data logger. This device converted the data to digital form and transferred the data to a computer dedicated to this project. The data logger also provided temperature control, feed water concentration control and some safety functions.



1. ALL DIMENSIONS ARE IN INCHES
2. DO NOT SCALE DRAWINGS
3. BREAK ALL SHARP EDGES
4. * - STARRED ITEMS ARE ADDITIONS TO THE EXISTING TEST BENCH.
5. O - CIRCLED PARTS SEE PARTS LISTS.
6. DATA LOG-GER SENDS DATA TO COMPUTER STORAGE.

ITEM	PART NO.	QTY	DESCRIPTION
MATERIAL			
		FILMTEC CORPORATION MINNEAPOLIS MINNESOTA 55435 USA	
TOLERANCES	TITLE		
X .100			
XX .030			
XXX .010			
Fraction 1/32			
DRAWN BY KLINGE/EEL	DATE 9-2-86	NEXT ASSEMBLY	
CHECKED KK	SHEET / OF /	REVISION C	
AUTHORIZED	SCALE ~	NUMBER 3-0387	

TEST PROCEDURE

Phase I testing consisted of three different tests (fresh water feed, brackish water feed and synthetic seawater feed). A total of 18 prototype reverse osmosis elements were tested. Each element was run eight hours a day for two days for each test. The following two pages contains a list of reverse osmosis test parameters to be measured. Table 1 (below) lists the specified compositions of the three feedwaters.

TABLE 1
SPECIFIED COMPOSITION OF DESIGNATED
FEEDWATERS

Fresh water: 500 mg/l \pm 5% NaCl

Brackish water: 5,000 mg/l \pm 5% NaCl

Seawater: ASTM-D-1141, "Substitute Ocean Water,
Formula A, Section 6, without Heavy Metals"

Chlorinated feedwater: 5,000 mg/l NaCl plus 5, 0, 10 mg/l
available chlorine

Fresh water feed was 500 ppm \pm 5% NaCl, and the fresh water test was conducted at 320 psi operating pressure. Brackish water feed was 5000 ppm \pm 5% NaCl, and the brackish water test was conducted at 375 psi operating pressure. Synthetic sea water was ASTM-D-1141 "substitute ocean water", and the synthetic sea water test was conducted at 800 psi operating pressure. All three tests in Phase I testing were conducted at 25°C. All of the test data were collected by the data logger and were sent to a microprocessor and stored therein.

TABLE 2

LIST OF TEST REQUIREMENTS

1. When tests were taken, hourly readings.
2. Analysis of feedwater and product water
3. Feedwater
 - a. pH
 - b. Total dissolved solids content (TDS)
 - c. Chloride ion concentration
 - d. Pressure (psig)
 - e. Flow into test stand
 - f. Conductivity
 - g. Temperature °F, °C \pm 1°C
4. Brine (waste streams)
 - a. pH
 - b. TDS
 - c. Chloride ion concentration
 - d. Flow in gpm
 - e. Flow in lb/time interval
 - f. Temperature °F, °C \pm 1°C
 - g. Conductivity
5. Product Water
 - a. pH
 - b. TDS
 - c. Chloride ion concentration
 - d. Temperature °F, °C \pm 1°C
 - e. Flow in gpm
 - f. Flow in lb/time interval
 - g. Conductivity (uS)
6. Percent chloride ion rejection
7. Product flow in gal/day
8. Percent recovery
9. Delta P (change in pressure) across element in test stand
10. Provide product flow curve vs. pressure for fresh, brackish and seawater
11. Provide temperature correction factor chart, plot feed salt concentration vs. salt rejection

In Phase I testing, feed water and permeate water were manually sampled once a day, and their conductivity as well as the chloride ion concentrations were manually measured. The chloride ion concentrations were measured by preparing standard chloride solutions and using a chloride ion meter. Reject flow rate and permeate flow rate were checked once a day volumetrically to confirm the displayed flow rates.

SUMMATION OF TEST RESULTS

Table I contains a summary of flux and salt rejection data for the 18 prototype elements operated under "fresh water" conditions. Fluxes exceeded 1850 gpd for all 18 elements, tested at 320 psi operating pressure and 25°C. Chloride ion rejection exceeded 99.5% in all cases, as well.

Table II contains similar data under seawater test conditions. Seventeen out of 18 elements exceeded the 1850 gpd flux minimum, operated at 800 psi and 25°C. Chloride ion rejection varied from 98.9 to 99.3% for all 18 elements.

Table III contains a summary of flux and chloride ion rejection for the 18 prototype elements operated under "brackish water" test conditions. All elements exceeded the flux of 1850 gpd, operated at 375 psi and 25°C. Chloride ion rejections were all above 99.0% except for two elements.

The summary data in these three tables were taken from the final operating data at the end of the second 8 hours of testing on the subject elements in each of the three test conditions.

TABLE 3

SUMMARY OF PROTOTYPE ELEMENT TEST DATA ON FRESH WATER FEED

<u>Serial #</u>	<u>Avg. Flux (gpd)</u>	<u>Avg. Chloride Rejection (%)</u>
307017	2300	99.6
307019	2600	99.6
307004	2250	99.7
307014	2450	99.7
307010	2350	99.7
307016	2100	99.7
307000	2500	99.7
307001	2400	99.7
307018	2400	99.7
307008	2550	99.7
307013	2050	99.7
307006	2250	99.7
307005	2000	99.7
307021	1950	99.7
307012	1900	99.7
307015	2350	99.7
307020	2050	99.7
307007	1830	99.4
307011	1750	99.7
307003	2350	99.3

Test Conditions:

Operating Test Pressure = 320 psi

Permeate Temperature = 25°C

Feed Concentration = 500 ppm ± 5% NaCl

TABLE 4

SUMMARY OF PROTOTYPE ELEMENT TEST DATA ON BRACKISH WATER FEED

<u>Serial #</u>	<u>Flux (gpd)</u>	<u>Chloride Rejection (%)</u>
307019	2210	99.3
307000	1920	99.0
307016	2340	99.2
307013	2500	99.3
307008	2250	99.4
307021	1870	99.3
307005	3300	99.3
307015	2400	99.5
307012	3050	99.5
307007	1850	99.1
307020	1990	98.8
307006	2180	99.0
307001	2400	98.7
307004	2220	99.2
307017	2370	99.4
307003	2500	99.4
307016	2720	99.4
307018	2590	99.1
307010	2350	99.4
307014	2280	99.3
307011	2160	99.3

Test Conditions: Operating Test Pressure = 375 psi
Feed Conductivity = 9200 umho \pm 5% NaCl
Permeate Temperature = 25°C

TABLE 5

SUMMARY OF PROTOTYPE ELEMENT TEST DATA ON SYNTHETIC SEAWATER FEED

<u>Serial #</u>	<u>Flux (gpd)</u>	<u>Cl⁻ Rejection (%)</u>
307006	2140	98.9
307007	1850	98.9
307013	2360	99.0
307015	1800	98.9
307020	1900	99.1
307012	2300	98.6
307010	2380	99.2
307014	2200	99.1
307011	2150	99.1
307019	2570	98.9
307016	2600	98.8
307000	2100	98.9
307004	2680	98.9
307003	2070	99.1
307017	2400	99.3
307005	2080	99.1
307021	2070	99.1
307008	2220	99.0

Test Conditions:

Operating Test Pressure = 800 psi

Permeate Temperature = 25°C

Feed Concentration = 35000 ppm \pm 5% synthetic sea water

GENERAL DESCRIPTION OF PHASE I EVENTS AND FINDINGS

Initiation of this procurement contract occurred on 29 July 1986. Initiation of Phase I testing was planned for early September, but was actually delayed until early November. Delay was caused by the fact that the test apparatus was not yet fully assembled, and a few key parts were not delivered on time by suppliers.

In preparation for Phase I, a total of 22 prototype elements, designated as XP30HR-6060M elements, were fabricated. Eighteen were required for test purposes. The other four were available as spares, in case any of the first 18 elements did not meet salt rejection criteria.

November 1986

All 22 prototype elements were tested with 3.2% NaCl feedwater at 800 psi at 25°C. All elements showed low fluxes (1500-1750 gpd) due to the selection of the specific SW30-HR grades used in these elements. Salt rejection exceeded 99% for all 22 elements.

All 22 elements were subjected to FilmTec's proprietary treatment with nitrous acid to enhance flux and salt rejection. All 22 elements were then tested with 3.5% synthetic seawater at 800 psi. Flux increases averaged 57% as a result of this treatment. This was somewhat below expectations based on lab bench trials (100% flux increase).

During these baseline tests, the PID controller for system pressure control did not work at all, and it was replaced. The new PID controller was calibrated and tuned to appropriate set-point. The chloride ion sensors also did not work well. The span seemed too wide, and it was just not very reliable. The chiller that controlled the test loop feedwater temperature was not able to maintain the required 25°C at 800 psi for more than 1-2 hours. Therefore, baseline tests had to be stretched out to allow the cooling system to "catch up" between tests.

December 1986

Upon completion of the baseline tests at 800 psi, 25°C, and 3.2% NaCl, the prototype elements were re-treated with FilmTec's proprietary nitrous acid treatment. The first proprietary treatment for improved flux and chlorine tolerance was apparently not conducted long enough and had not taken full effect.

The repeat treatment raised flux levels a little more, but still not to the anticipated 100% flux increase level. The treatment was done for the third time, but provided no improvement in flux over the second treatment. Salt rejection for these elements had dropped to the 98.8-99.1% level as a result of the treatments. See Table 6 for pre- and post-treatment data.

An element was cleaned with 0.5% NaOH/EDTA and rinsed with RO water for half an hour. This gave some increase in flux. All of the elements were then cleaned with 0.5% NaOH/EDTA and rinsed with RO water for half an hour. Since the fluxes of elements at this point were all above the minimum flux required by the contract under standard seawater test conditions, Phase I testing commenced. Two-thirds of the fresh water feed test was complete by the end of December 1986.

Two of the original 22 elements were autopsied during this time period to check membrane construction details and active membrane area. Thus, two remained as spares, along with 18 for full scale Phase I tests.

Table 6

XP30HR-6040M Element Test Results

Serial Number	Initial Baseline Test Data*		Post-Treatment Baseline Test Data**	
	Flux (gpd)	Salt Rej. (%)	Flux (gpd)	Salt Rej. (%)
307000	1680	99.2	2860	99.0
307009	1710	99.0	2730	98.9
307013	1510	99.2	2840	99.0
307017	1620	99.2	2710	98.9
307008	1670	99.1	2660	99.0
307012	1750	99.1	2380	98.8
307004	1750	99.1	2630	99.0
307003	1640	99.1	2130	98.8
307016	1690	99.0	2280	98.8
307021	1730	99.1	2160	98.8
307010	1680	99.2	2610	99.0
307005	1620	99.2	2530	98.8
307007	1700	99.1	2680	99.0
307006	1710	99.2	2590	98.9
307011	1730	99.0	2630	98.9
307015	1700	99.1	2470	98.9
307020	1460	99.1	2440	99.1
307001	1610	99.1	2650	99.0
307018	1580	99.1	2750	98.7
307014	1560	99.2	2850	98.8
307019	1570	99.2	2790	99.0
307002	1560	99.1	2510	98.8
Average:	1650	99.1	2590	98.9

* Test Conditions: production test loop, simulated seawater (NaCl, 53400 \pm 600 umho feed conductivity), 800 psi, 25°C

** Test Conditions: R&D test loop, ASTM synthetic seawater (51300 \pm 350 umho), 800 psi, 25°C

January 1987

The remainder of the elements were tested at fresh water feed test conditions by mid-January. Synthetic seawater tests were then begun. However, the elements all seemed to have lost substantial flux. The elements were subsequently cleaned with 0.5% NaOH/EDTA and rinsed with RO water for half an hour. Fluxes were increased substantially by the NaOH/EDTA cleaning. Such behavior is characteristic of organic or biological fouling. Bacterial growth may have occurred in the elements during storage while they were not being tested.

Downtime was experienced in late January because the feed pump failed to provide sufficient feed flow. The pump was sent to the manufacturer and was overhauled and re-assembled. An additional heat exchanger was also installed in a series to provide some auxiliary cooling capacity. This enabled the system to maintain the feed temperature at 25°C at 800 psi.

February 1987

The synthetic seawater tests resumed. However, the salt rejections of the first few elements which were tested right after the NaOH/EDTA cleaning were low (98%). Yet, salt rejections of elements which were tested several days after the NaOH/EDTA cleaning were good (99%). Subsequently, the elements with low salt rejections (98%) were retested after 5 days; salt rejections improved to 99+% for these as well.

Some system malfunctions and downtime continued to occur during the synthetic seawater tests. The reject flow meter was malfunctioning and was fixed by a serviceman. Also, the feedwater temperature probe was recalibrated. Broken belts on the feed pump were replaced and, while the system was down, the feedwater reservoir was emptied and cleaned with alkaline detergent cleaner.

Also, during the changeover time from one pressure vessel to another, the feed pressure sometimes exceeded the high pressure cutoff value, inadvertently shutting off the test system. This problem was resolved by tuning the PID controller's response more sensitively to the changing test pressure during the element changeover time, and by increasing the high pressure cutoff value to 950 psi.

The brackish water tests were begun at about the end of February.

March 1987

The brackish water tests continued. However, flux losses were again encountered on elements that laid in storage between tests. They were again cleaned with 0.5% NaOH/EDTA cleaner and rinsed with RO water. The fluxes of the elements after NaOH/EDTA cleaning improved substantially.

The pump broke down again in March and was re-assembled by the manufacturer. The reject flow meter malfunctioned again, was fixed by a serviceman, and was recalibrated. One element which had been tested at brackish and seawater conditions, but had inadvertently not been tested at fresh water feed test conditions was now tested.

CONCLUSIONS

All of the 18 prototypes chosen for testing on the three feedwaters in this Phase I test performed satisfactorily. All met or exceeded 99.6 percent chloride ion rejection on fresh water. Chloride ion rejection data on brackish water were in the range of 98.7 to 99.5 percent. Chloride ion rejection data on seawater were in the range of 98.6 to 99.2 percent (median value was 99.0 percent).

The chloride ion rejection values for the prototype elements under brackish water and seawater conditions were below the desired level of 99.5 percent expressed in the original RFQ. However, FilmTec's proposal in response to this RFQ specifically noted that the 99.5 percent value was unattainable for these prototype elements, and the contract effort was undertaken on this basis. We had predicted an average chloride ion rejection of 99.1 percent for these prototypes. Actual result was 99.0 percent. All of the elements exceeded the 98.5 percent chloride ion rejection level considered necessary for potable water production from seawater.

Water fluxes exceeded the minimum of 1850 gpd for 17 of the 18 prototypes under the specified seawater test conditions of 3.5% synthetic seawater, 800 psi, 25°C.

FRESH WATER TEST

11-21-2021 : 3113

ELEMENT TESTED										REFINE STREAM PARAMETERS										FREQUENCY WATER PARAMETERS										SOURCE DATA										
Serial	Gate	Line	Flow	Cond	Itb	Ci-	pn	Inlet F	Flow	Temp	psi	gfm	deg C	uachs	pps	Itb	Ci-	pn	M Flow	Temp	psi	gfm	deg C	uachs	pps	Itb	Ci-	pn	Flow	Temp	psi	gfm	deg C	uachs	pps	Itb	Ci-	pn		
3070017	18-Dec	11:43	25.1	987	454	280	6.6	321	20.41	25.1	1075	573	18.71	25.4	10.3	5.2	1	5.9	1.7	276	15621	97.6	6.1	9																
3070017	18-Dec	11:43	25.1	971	476	280	6.6	321	20.41	25.1	1075	573	18.71	25.4	10.3	5.2	1	5.9	1.7	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	25.1	994	497	280	6.6	321	20.41	25.1	1080	540	18.71	25.4	10.3	5.2	1	5.9	1.7	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	25.1	1003	502	280	6.6	330	20.41	26.2	1080	540	18.71	26.5	10.3	5.2	1	5.9	1.7	276	15621	97.6	6.1	11																
3070017	18-Dec	11:43	25.5	1004	502	280	6.6	324	20.41	25.5	1072	540	18.71	26.0	10.3	5.2	1	5.9	1.7	276	15621	97.6	6.1	11																
3070017	18-Dec	11:43	25.5	1006	504	280	6.6	321	20.41	25.5	1072	540	18.71	25.5	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	11																
3070017	18-Dec	11:43	24.9	1006	515	280	6.6	321	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	9																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9	1072	540	18.71	25.2	10.3	5.2	1	5.9	1.6	276	15621	97.6	6.1	10																
3070017	18-Dec	11:43	24.9	1007	515	280	6.6	320	20.41	24.9																														

[illegible]

ELEMENT /TESTED										FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA			
Serial	Date	Line	Temp	Cond	10S	Cl-	ph	Inlet F	Flow	Temp	Cond	10S	Cl-	ph	N	Flow	Temp	Cond	10S	Meas	Cl-	ph	F	Flow	Temp	Cond	10S	Cl-	ph	Delta													
Number			deg C	uachs	ppm	ppm		psi	GPM	deg C	uachs	ppm	ppm		GPM	deg C	uachs	ppm	ppm				GPM	deg C	uachs	ppm	ppm			psi													
307004	19/0ec	18:42	21.4	981	490	280	6.5	319	20.31	21.4	1053	526	316	6.5	18.91	21.6	5.0	2.5	1	5.7	1.4	2034	15821	99.6	7.0	18																	
307004	19/0ec	18:42	21.4	980	490	280	6.5	320	20.31	21.4	1053	526	316	6.5	18.91	21.6	5.0	2.5	1	5.7	1.4	2044	15821	99.6	7.0	18																	
307004	19/0ec	18:42	21.4	980	490	280	6.5	320	20.31	21.4	1052	526	316	6.5	18.91	21.6	5.0	2.5	1	5.7	1.4	2064	15821	99.6	7.0	19																	
307017	19/0ec	16:57	21.2	980	490	280	6.5	320	20.41	21.2	1061	530	316	6.5	18.81	21.5	5.0	2.5	1	5.7	1.6	2275	15821	99.6	7.8	9																	
307017	19/0ec	19:12	21.0	981	490	280	6.5	321	20.41	21.0	1061	530	318	6.5	18.81	21.3	5.0	2.5	1	5.7	1.6	2234	15821	99.6	7.6	9																	
307017	19/0ec	19:27	20.6	980	490	280	6.5	320	20.31	20.8	1059	530	318	6.5	18.81	21.1	5.0	2.5	1	5.7	1.5	2209	15821	99.6	7.5	9																	
307017	19/0ec	19:27	20.8	980	490	280	6.5	320	20.31	20.8	1059	530	318	6.5	18.81	21.1	5.0	2.5	1	5.7	1.5	2205	15821	99.6	7.5	9																	
307017	19/0ec	19:42	20.6	980	490	280	6.5	319	20.31	20.6	1058	527	317	6.5	18.81	20.9	5.0	2.5	1	5.7	1.5	2183	15821	99.6	7.5	9																	
307017	19/0ec	19:57	20.4	982	491	280	6.5	323	20.41	20.4	1059	530	318	6.5	18.91	20.7	5.0	2.5	1	5.7	1.5	2195	15821	99.6	7.5	9																	
307017	19/0ec	20:12	20.5	980	490	280	6.5	318	20.31	20.5	1058	529	317	6.5	18.81	20.8	5.0	2.5	1	5.7	1.5	2172	15821	99.6	7.4	8																	
307017	19/0ec	20:27	20.9	981	490	280	6.5	319	20.31	20.8	1060	530	316	6.5	18.81	21.2	5.0	2.5	1	5.7	1.5	2194	15821	99.6	7.5	8																	
307017	19/0ec	20:42	21.2	982	491	280	6.5	319	20.31	21.2	1060	530	318	6.5	18.81	21.6	5.0	2.5	1	5.7	1.5	2207	15821	99.6	7.5	8																	
307017	19/0ec	20:57	21.6	980	490	280	6.5	320	20.41	21.6	1060	530	318	6.5	18.81	21.9	5.0	2.5	1	5.7	1.6	2242	15821	99.6	7.5	9																	
307017	19/0ec	21:12	22.7	986	495	280	6.5	320	20.41	22.7	1069	534	321	6.5	18.81	23.1	5.0	2.5	1	5.7	1.6	2314	15821	99.6	7.9	6																	
307017	19/0ec	21:27	21.8	989	494	280	6.5	320	20.31	23.8	1075	536	322	6.5	18.71	24.2	5.0	2.5	1	5.7	1.6	2375	15821	99.6	8.1	8																	
307																																											

99.7 9.1 17

ELEMENT /TESTED		FEED WATER PARAMETERS						BRINE STREAM PARAMETERS						PRODUCT WATER PARAMETERS						OTHER DATA						
Serial	Date	Time	Temp	Cond	TDS	Cl-	ph	Inlet F Flow	Temp	Cond	TDS	Cl-	ph	M Flow	Temp	Cond	TDS	Meas Cl	ph	P Flow	P Flow F	Flow	Cl-	Per.	Della	
Number			deg C	uachts	ppm	ppm		psi	GPM	deg C	uachts	ppm	ppm		GPM	deg C	uachts	ppm	ppm		GPM	GPD	lb/day	Reg	Rec.	psi
307004	20/Dec	18:10	30.4	992	496	290	6.5	322	20.4	30.4	1091	546	327	6.5	18.5	30.7	5.0	2.5		5.7	1.9	2697	19821	99.7	9.2	17
307004	20/Dec	18:10	30.4	991	496	290	6.5	322	20.4	30.4	1090	545	327	6.5	18.5	30.7	5.0	2.5		5.7	1.9	2702	19821	99.7	9.2	17
307004	20/Dec	18:25	30.4	991	496	290	6.5	319	20.4	30.4	1087	544	326	6.5	18.5	30.7	5.0	2.5		5.7	1.9	2668	19821	99.7	9.1	17
307004	20/Dec	18:40	30.4	989	494	290	6.5	321	20.4	30.4	1088	544	326	6.5	18.5	30.7	5.0	2.5		5.7	1.9	2691	19821	99.7	9.2	17
307004	20/Dec	18:40	30.4	988	494	290	6.5	321	20.4	30.4	1086	543	326	6.5	18.5	30.7	5.0	2.5		5.7	1.9	2668	19821	99.7	9.2	17

ELEMENT / TESTED										FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										REFRIGILANT WATER PARAMETERS										OTHER DATA									
Serial	Date	Line	Temp	Cond	IDS	Cl-	ph	Inlet	F Flow	Temp	Cond	IDS	Cl-	ph	M Flow	Temp	Cond	IDS	Cl-	ph	F Flow	F Flow	Cl-	ph	Rej	Per	Delta																						
Number			deg C	uach/s	ppm	ppm		psi	gpm	deg C	uach/s	ppm	ppm		gpm	deg C	uach/s	ppm	ppm		gpm	gpm	lb/day	lb/day	Rej	Per	Delta																						
307014	29/Dec	9:31	25.0	1022	511	290	6.7	320	20.4	25.0	1125	562	338	6.7	18.5	24.9	6.1	3.05	1	6.0	1.9	2129	22728	99.7	9.3	10																							
307014	29/Dec	10:19	24.9	982	492	290	6.7	320	20.4	24.9	1060	540	324	6.7	18.5	24.8	6.1	3.05	1	6.0	1.9	2639	22111	99.7	9.1	9																							
307014	29/Dec	10:34	25.1	1067	534	290	6.7	322	20.4	25.1	1173	586	352	6.7	18.5	25.0	6.1	3.05	1	6.0	1.9	2636	22453	99.7	9.2	9																							
307014	29/Dec	10:49	24.9	1011	506	290	6.7	320	20.3	24.9	1110	555	333	6.7	18.5	24.9	6.1	3.05	1	6.0	1.8	2637	22128	99.7	9.1	9																							
307014	29/Dec	11:4	25.0	1034	517	290	6.7	321	20.4	25.0	1136	568	341	6.7	18.5	24.9	6.1	3.05	1	6.0	1.9	2669	22228	99.7	9.1	9																							
307014	29/Dec	11:19	24.8	961	480	290	6.7	320	20.3	24.8	1055	522	316	6.7	18.5	24.8	6.1	3.05	1	6.0	1.8	2650	22070	99.7	9.0	9																							
307014	29/Dec	11:49	25.1	964	482	290	6.7	321	20.3	25.1	1059	530	318	6.7	18.5	25.0	6.1	3.05	1	6.0	1.8	2634	22103	99.7	9.1	9																							
307014	29/Dec	11:49	25.1	963	482	290	6.7	321	20.4	25.1	1056	528	317	6.7	18.6	25.0	6.1	3.05	1	6.0	1.8	2650	22071	99.7	9.1	8																							
307014	29/Dec	12:4	24.9	982	491	290	6.7	320	20.3	24.9	1072	538	323	6.7	18.5	24.9	6.1	3.05	1	6.0	1.8	2633	21929	99.7	9.0	8																							
307014	29/Dec	12:19	25.1	977	486	290	6.7	320	20.4	25.1	1072	536	322	6.7	18.6	25.0	6.1	3.05	1	6.0	1.8	2639	21928	99.7	9.0	8																							
307014	29/Dec	12:34	24.9	979	490	290	6.7	320	20.3	24.9	1074	537	322	6.7	18.5	24.9	6.1	3.05	1	6.0	1.8	2622	21877	99.7	9.0	9																							
307014	29/Dec	12:49	25.1	968	454	290	6.7	320	20.4	25.1	1061	530	318	6.7	18.6	25.1	6.1	3.05	1	6.0	1.8	2636	21953	99.7	9.0	8																							
307014	29/Dec	13:4	24.9	988	494	290	6.7	322	20.4	24.9	1082	541	325	6.7	18.6	24.9	6.1	3.05	1	6.0	1.8	2618	21803	99.7	8.9	9																							
307014	29/Dec	13:19	25.1	966	483	290	6.7	321	20.4	25.1	1059	530	316	6.7	18.6	25.1	6.1	3.05	1	6.0	1.8	2619	21812	99.7	8.9	8																							
307014	29/Dec	13:34	24.9	992	456	290	6.7	321	20.4	24.9	1067	544	326	6.7	18.6	24.7	6.1	3.05	1	6.0	1.8	2410	21277	99.7	8.9	8																							
307014	29/Dec	13:49	25.1	995	498	290	6.7																																										

[illegible]

ELEMENT /TESTED						FEED WATER PARAMETERS							BRINE STREAM PARAMETERS								PRODUCT WATER PARAMETERS									OTHER DATA			
Serial Number	Date	Isize	Temp	Cond	IDIS	Cl-	pH	Inlet F	GFM	psi	Flow	Temp	Cond	IDIS	Cl-	pH	M Flow	GFM	deg C	Temp	Cond	IDIS	Meas Cl	pH	P Flow	GFM	Flow	F Flow	Cl-	Per.	Delta		
			: deg C	: uoahs	: ppa	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	
307014	30/Dec	16:5	25.1	1066	503	300	6.7	321	20.31	25.1	1068	549	379	6.7	18.61	25.1	5.5	2.75	1	6.0	1.7	2475	20421	99.7	8.5	8							
307014	30/Dec	16:20	24.9	1019	510	300	6.7	321	20.41	24.9	1110	555	333	6.7	18.71	24.9	5.5	2.75	1	6.0	1.7	2452	20421	99.7	8.1	7							
307014	30/Dec	16:20	24.9	1019	510	300	6.7	321	20.41	24.9	1111	556	333	6.7	18.71	24.9	5.5	2.75	1	6.0	1.7	2459	20479	99.7	8.4	8							
307014	30/Dec	16:20	24.9	1018	509	300	6.7	321	20.41	24.9	1110	555	333	6.7	18.71	24.9	5.5	2.75	1	6.0	1.7	2457	20462	99.7	8.4	8							
307014	30/Dec	16:21	24.9	1017	508	300	6.7	321	20.41	24.9	1109	554	332	6.7	18.71	24.9	5.5	2.75	1	6.0	1.7	2446	20371	99.7	8.3	7							
307014	30/Dec	16:26	25.0	1018	509	300	6.7	320	20.41	25.0	1111	556	333	6.7	18.71	25.0	5.5	2.75	1	6.0	1.7	2460	20654	99.7	8.4	6							
307014	30/Dec	16:26	25.0	1020	510	300	6.7	320	20.41	25.0	1113	556	334	6.7	18.71	25.0	5.5	2.75	1	6.0	1.7	2460	20654	99.7	8.4	7							
307014	30/Dec	16:26	25.2	1012	506	300	6.7	319	20.31	25.2	1104	552	331	6.7	18.61	25.2	5.5	2.75	1	6.0	1.7	2461	20651	99.7	8.5	6							
307014	30/Dec	16:35	24.9	1019	510	300	6.7	322	20.41	24.9	1111	556	333	6.7	18.71	24.9	5.5	2.75	1	6.0	1.7	2464	20521	99.7	8.4	8							
307014	30/Dec	16:50	25.1	1004	502	300	6.7	320	20.31	25.1	1095	548	328	6.7	18.61	25.1	5.5	2.75	1	6.0	1.7	2459	20479	99.7	8.4	6							
307014	30/Dec	17:5	25.0	1019	510	300	6.7	321	20.41	25.0	1110	555	333	6.7	18.71	25.0	5.5	2.75	1	6.0	1.7	2459	20479	99.7	8.4	7							
307014	30/Dec	17:6	25.0	1018	509	300	6.7	321	20.41	25.0	1110	555	333	6.7	18.71	25.0	5.5	2.75	1	6.0	1.7	2459	20479	99.7	8.4	6							
307014	30/Dec	17:6	25.0	1019	510	300	6.7	321	20.41	25.0	1110	555	333	6.7	18.71	25.0	5.5	2.75	1	6.0	1.7	2459	20479	99.7	8.4	8							
307010	30/Dec	17:20	25.0	1020	510	300	6.7	320	20.31	25.0	1109	554	331	6.7	18.71	25.0	5.5	2.75	1	6.0	1.6	2372	19755	99.7	8.1	19							
307010	30/Dec	17:35	24.9	1020	510	300	6.7	321	20.31	24.9	1108	554	332	6.7	18.71	24.8	5.5	2.75	1	6.0	1.6	2349	19563	99.7	8.0	19							
307010	30/Dec	17:50	25.1	1019	510	300	6.7	321	20.31	25.1	1107	554	332	6.7	18.71	25																	

[illegible]

TELEMETRY/TESTED				FEED WATER PARAMETERS					BRINE STREAM PARAMETERS					PRODUCT WATER PARAMETERS					OTHER DATA							
Serial Date	Time	Temp	Cond	TD5	Cl- ppm	ph	Inlet psi	Flow GPM	Temp deg C	Cond uohms	TD5 ppm	Cl- ppm	ph	Wflow GPM	Temp deg C	Cond uohms	TD5 ppm	Cl- ppm	ph	Pflow GPM	Pflow l/day	Recovery %	Delta psi			
307018	24/Dec	5:19	24.9	993	496	298	0.0	369	21.41	24.9	1077	539	323	0.0	19.71	24.9	8	4	2	0.0	1.7	2443	20345	99.2	7.9	7
307018	24/Dec	5:34	25.1	997	499	299	0.0	371	21.31	25.1	1084	542	325	0.0	19.61	25.1	8	4	2	0.0	1.7	2464	20520	99.2	8.0	7
307018	24/Dec	5:49	24.9	996	498	299	0.0	370	21.31	24.9	1082	541	325	0.0	19.61	24.9	8	4	2	0.0	1.7	2443	20345	99.2	8.0	7
307018	24/Dec	6:1	25.1	994	497	298	0.0	369	21.31	25.1	1080	540	324	0.0	19.61	25.1	8	4	2	0.0	1.7	2455	20445	99.2	8.0	6
307018	24/Dec	6:19	24.8	996	498	299	0.0	370	21.41	24.8	1081	540	324	0.0	19.71	24.9	8	4	2	0.0	1.7	2446	20370	99.2	7.9	7
307018	24/Dec	6:34	25.1	994	497	298	0.0	369	21.41	25.1	1079	540	324	0.0	19.71	25.1	8	4	2	0.0	1.7	2440	20320	99.2	7.9	7
307018	24/Dec	6:49	24.8	996	498	299	0.0	371	21.41	24.8	1081	541	324	0.0	19.71	24.9	8	4	2	0.0	1.7	2441	20329	99.2	7.9	7
307018	24/Dec	7:1	25.0	995	498	299	0.0	371	21.41	25.0	1081	540	324	0.0	19.71	25.1	8	4	2	0.0	1.7	2457	20462	99.2	8.0	7
307018	24/Dec	7:19	24.9	998	499	299	0.0	369	21.41	24.9	1082	541	325	0.0	19.71	24.9	8	4	2	0.0	1.7	2427	20212	99.2	7.9	6
307018	24/Dec	7:48	24.9	997	498	299	0.0	370	21.41	24.9	1081	540	324	0.0	19.71	24.9	8	4	2	0.0	1.7	2425	20195	99.2	7.9	7
307018	24/Dec	8:3	25.1	986	493	296	0.0	370	21.41	25.1	1071	535	321	0.0	19.71	25.1	8	4	2	0.0	1.7	2447	20379	99.2	7.9	7
307018	24/Dec	8:18	24.9	996	498	299	0.0	370	21.41	24.9	1080	540	324	0.0	19.71	24.9	8	4	2	0.0	1.7	2436	20287	99.2	7.9	6
307018	24/Dec	8:33	25.1	982	491	295	0.0	370	21.41	25.1	1066	533	320	0.0	19.71	25.1	8	4	2	0.0	1.7	2439	20312	99.2	7.9	6
307018	24/Dec	9:1	24.9	995	498	299	0.0	369	21.41	24.9	1080	540	324	0.0	19.71	25.0	8	4	2	0.0	1.7	2425	20195	99.2	7.9	7
307018	24/Dec	9:16	25.0	983	491	295	0.0	372	21.41	25.0	1066	533	320	0.0	19.71	25.1	8	4	2	0.0	1.7	2442	20337	99.2	7.9	7
307018	24/Dec	9:31	24.9	996	498	299	0.0	371	21.31	24.9	1081	540	324	0.0	19.61	24.9	8	4	2	0.0	1.7	2432	20254	99.2	7.9	6
307018	24/Dec	9:46	25.1	985	493	296	0.0	370	21.31	25.1	1069	535	321	0.0	19.61	25.1	8	4	2	0.0	1.7	2432	20254	99.2	7.9	7
307018	24/Dec	10:1	24.9	994	497	298	0.0	371	21.41	24.9	1079	539	324	0.0	19.71	24.9	8	4	2	0.0	1.7	2436	20287	99.2	7.9	7
307018	24/Dec	10:16	25.1	985	492	295	0.0	370	21.41	25.1	1068	534	320	0.0	19.71	25.1	8	4	2	0.0	1.7	2429	20229	99.2	7.9	7

ELEMENTS TESTED						FEED WATER PARAMETERS							BRINE STREAM PARAMETERS								PRODUCT WATER PARAMETERS									OTHER DATA			
Serial Number	Date	Time	Temp	Cond	TDS	pH	Inlet F	Flow	Temp	Cond	TDS	Cl-	pH	M Flow	Temp	Cond	TDS	Meas Cl	pH	P Flow	Temp	Cond	TDS	Cl-	Per.	Delta							
			deg C	uohms	ppm		psi	GPM	deg C	uohms	ppm	ppm		GPM	deg C	uohms	ppm	ppm		GPM	deg C	uohms	ppm	ppm	l/day	Rec.	psi						
307008	31/Dec	9:14	24.1	1028	514	305	6.5	322	20.1	24.1	1139	570	342	6.5	18.1	24.1	4.7	2.4	1	5.3	2.0	2850	23735	99.7	9.9	8							
307008	31/Dec	9:17	24.3	1013	506	305	6.5	320	20.1	24.3	1122	561	337	6.5	18.1	24.2	4.7	2.4	1	5.4	2.0	2855	23777	99.7	9.9	7							
307008	31/Dec	9:32	24.9	1020	510	305	6.5	323	20.4	24.9	1129	564	339	6.5	18.4	24.8	4.7	2.4	1	5.4	2.0	2866	23868	99.7	9.8	9							
307008	31/Dec	9:47	25.0	1035	518	305	6.5	321	20.5	25.0	1144	572	343	6.5	18.5	25.0	4.7	2.4	1	5.5	2.0	2845	23853	99.7	9.6	9							
307008	31/Dec	10:2	24.9	1014	507	305	6.5	321	20.4	24.9	1118	559	335	6.5	18.5	24.8	4.7	2.4	1	5.6	1.9	2788	23219	99.7	9.5	10							
307008	31/Dec	10:17	25.0	1010	505	305	6.6	319	20.4	25.0	1114	557	334	6.6	18.5	25.0	4.7	2.4	1	5.6	1.9	2786	23219	99.7	9.5	9							
307008	31/Dec	10:32	25.0	992	466	305	6.6	320	20.4	25.0	1093	546	326	6.6	18.5	25.0	4.7	2.4	1	5.7	1.9	2755	22977	99.7	9.4	9							
307008	31/Dec	10:47	25.0	1016	505	305	6.6	321	20.4	25.0	1114	557	334	6.6	18.5	25.0	4.7	2.4	1	5.7	1.9	2771	23277	99.7	9.4	8							
307008	31/Dec	11:2	25.1	969	494	305	6.7	321	20.4	25.1	1090	545	327	6.7	18.5	25.0	4.7	2.3	1	5.7	1.9	2755	22944	99.7	9.4	9							
307008	31/Dec	11:14	25.1	984	492	305	6.7	323	20.4	25.1	1084	542	325	6.7	18.5	25.1	4.7	2.3	1	5.7	1.9	2763	23010	99.7	9.4	8							
307008	31/Dec	11:33	25.0	1002	501	305	6.7	321	20.4	25.0	1102	552	331	6.7	18.5	24.9	4.7	2.4	1	5.8	1.9	2770	22653	99.7	9.3	8							
307008	31/Dec	11:48	25.0	1017	508	305	6.7	320	20.4	25.0	1119	560	336	6.7	18.5	25.0	4.6	2.3	1	5.8	1.9	2770	22652	99.7	9.3	8							
307008	31/Dec	12:16	25.0	1023	512	305	6.7	321	20.4	25.0	1125	562	338	6.7	18.5	25.0	4.7	2.3	1	5.8	1.9	2719	22644	99.7	9.3	8							
307008	31/Dec	12:35	25.1	1010	505	305	6.7	321	20.4	25.1	1110	555	333	6.7	18.5	25.1	4.6	2.3	1	5.8	1.9	2699	22477	99.7	9.2	8							
307008	31/Dec	12:48	24.9	1021	510	305	6.7	320	20.4	24.9	1123	562	337	6.7	18.5	24.9	4.7	2.3	1	5.8	1.9	2687	22377	99.7	9.2	9							
307008	31/Dec	13:3	25.1	1018	509	305	6.7	320	20.4	25.1																							

ELEMENT/TESTED			FEED WATER PARAMETERS				BRINE STREAM PARAMETERS				PRODUCT WATER PARAMETERS				OTHER DATA											
Ser. #	Date	Time	Temp	Cond	TD5	Cl-	ph	Inlet F Flow	Temp	Brine	ph	W Flow	Temp	Cond	TD5	Cl-	ph	P Flow	F Flow	Rej	Delta					
Muxtr			deg C	uachts	ppa	ppa		psi	deg C	ppa		deg C	uachts	ppa	ppa			BPM	GPD	lb/day	psi					
307013	31/Dec	22:36	24.9	1040	520	305	7.0	321	20.3	24.9	1118	559	335	7.0	18.9	24.9	4.6	2.3	1	6.5	1.4	2071	1724	99.7	7.1	15
307013	31/Dec	22:51	25.1	1023	512	305	7.0	321	20.3	25.1	1100	550	330	7.0	18.9	25.1	4.6	2.3	1	6.5	1.4	2079	1714	99.7	7.1	16
307013	31/Dec	23: 6	24.9	1029	514	305	7.0	320	20.3	24.9	1105	552	332	7.0	16.9	24.9	4.6	2.3	1	6.5	1.4	2060	1715	99.7	7.0	14
307013	31/Dec	23:21	25.1	1052	526	305	7.0	320	20.3	25.1	1131	566	339	7.0	18.9	25.1	4.6	2.3	1	6.5	1.4	2073	1726	99.7	7.1	15
307013	31/Dec	23:36	24.9	1044	522	305	7.0	320	20.3	24.9	1122	561	337	7.0	18.9	24.9	4.6	2.3	1	6.5	1.4	2059	1714	99.7	7.0	15
307013	31/Dec	23:53	25.1	1029	514	305	7.0	321	20.3	25.1	1106	553	332	7.0	18.9	25.1	4.6	2.3	1	6.5	1.4	2075	1728	99.7	7.1	15
307013	1/Jan	0: 6	25.0	1047	524	305	7.0	321	20.3	25.0	1125	562	338	7.0	16.9	24.9	4.6	2.3	1	6.5	1.4	2062	1717	99.7	7.0	16
307013	1/Jan	0:21	25.0	1047	524	305	7.0	319	20.3	25.0	1125	562	337	7.0	18.9	25.0	4.6	2.3	1	6.5	1.4	2060	1715	99.7	7.0	15
307013	1/Jan	0:45	24.9	1046	523	305	7.0	320	20.3	24.9	1124	562	337	7.0	18.9	24.9	4.6	2.3	1	6.5	1.4	2059	1714	99.7	7.0	15
307013	1/Jan	1:16	25.1	1050	525	305	7.0	320	20.4	25.1	1118	559	335	7.0	19.1	25.1	4.7	2.3	1	6.6	1.3	1814	1510	99.7	6.2	20
307011	1/Jan	1:30	25.0	1046	523	305	7.0	320	20.3	25.0	1113	556	334	7.0	19.1	24.9	4.6	2.3	1	6.6	1.2	1791	1491	99.7	6.1	20
307011	1/Jan	1:45	25.0	1049	524	305	7.0	321	20.3	25.0	1117	558	335	7.0	19.1	25.0	4.6	2.3	1	6.6	1.2	1797	1496	99.7	6.1	20
307011	1/Jan	2: 0	25.1	1036	518	305	7.0	321	20.4	25.1	1103	552	331	7.0	19.1	25.1	4.6	2.3	1	6.6	1.3	1801	1499	99.7	6.1	19
307011	1/Jan	2:15	24.9	1046	524	305	7.0	320	20.3	24.9	1116	558	335	7.0	19.1	24.9	4.6	2.3	1	6.6	1.2	1798	1497	99.7	6.1	15
307011	1/Jan	2:30	25.1	1036	518	305	7.0	320	20.4	25.1	1102	551	331	7.0	19.1	25.1	4.6	2.3	1	6.6	1.3	1801	1499	99.7	6.1	20
307011	1/Jan	2:45	24.9	1049	524	305	7.0	320	20.3	24.9	1116	558	335	7.0	19.1	24.9	4.6	2.3	1	6.6	1.2					

ELEMENTS/TESTED						FEED WATER PARAMETERS							BRINE STREAM PARAMETERS								PRODUCT WATER PARAMETERS									OTHER DATA		
Serial Number	Date	Time	Inlet Temp deg C	Cond uachts	IDC ppm	Cl- ppm	pH	Inlet Flow psi	F Flow GPM	leap deg C	Cond uachts	IDC ppm	U-	ph	M Flow GPM	leap deg C	Cond uachts	IDC ppm	Meas Cl ppm	P Flow GPM	F Flow ID/day	Flow psi	Delta Rec.									
307008	1/Jan 13:18		24.9	1030	515	305	6.8	320	20.4	24.9	1133	566	340	6.8	18.5	24.9	4.6	2.3	1	5.8	1.9	2564	2135	95.7	9.2	7						
307008	1/Jan 13:33		25.1	1031	516	305	6.8	320	20.4	25.1	1133	566	340	6.8	18.5	25.1	4.6	2.3	1	5.8	1.9	2575	2145	95.7	9.2	8						
307008	1/Jan 13:48		24.9	1019	510	305	6.8	320	20.3	24.9	1120	560	336	6.8	18.5	24.9	4.6	2.3	1	5.9	1.8	2567	2137	95.7	9.1	8						
307008	1/Jan 14: 3		25.1	1018	509	305	6.8	321	20.4	25.1	1119	560	336	6.8	18.5	25.1	4.6	2.3	1	5.9	1.9	2577	2146	95.7	9.2	8						
307008	1/Jan 14:18		24.9	1028	514	305	6.8	322	20.4	24.9	1130	565	339	6.8	18.5	24.9	4.6	2.3	1	5.9	1.9	2679	2231	95.7	9.1	8						
307008	1/Jan 14:33		25.1	1017	508	305	6.8	321	20.4	25.1	1117	558	335	6.8	18.5	25.1	4.6	2.3	1	5.9	1.9	2580	2146	95.7	9.1	8						
307008	1/Jan 14:48		24.9	1020	510	305	6.8	321	20.4	24.9	1120	560	336	6.8	18.5	24.9	4.6	2.3	1	5.9	1.8	2584	2150	95.7	9.0	9						
307008	1/Jan 15: 3		25.1	1040	520	305	6.8	321	20.4	25.1	1143	572	345	6.8	18.5	25.1	4.6	2.3	1	5.9	1.9	2563	2151	95.7	9.1	6						
307008	1/Jan 15:18		24.9	1036	518	305	6.8	321	20.3	24.9	1137	568	341	6.8	18.5	24.9	4.6	2.3	1	5.9	1.8	2581	2149	95.7	9.0	8						
307008	1/Jan 15:33		25.0	1029	514	305	6.8	321	20.3	25.0	1130	565	339	6.8	18.5	25.1	4.6	2.3	1	5.9	1.8	2576	2145	95.7	9.1	8						
307008	1/Jan 15:48		24.9	1024	512	305	6.8	320	20.3	24.9	1124	562	337	6.8	18.5	24.8	4.6	2.3	1	5.9	1.8	2584	2152	95.7	9.0	7						
307008	1/Jan 16: 3		25.0	1024	512	305	6.8	321	20.3	25.0	1124	562	337	6.8	18.5	25.0	4.6	2.3	1	5.9	1.8	2516	2045	95.7	9.1	8						
307008	1/Jan 16:18		24.9	1021	510	305	6.8	320	20.3	24.9	1120	560	336	6.8	18.5	24.8	4.6	2.3	1	5.9	1.8	2575	2145	95.7	9.0	8						
307008	1/Jan 16:33		25.0	1031	516	305	6.8	319	20.3	25.0	1131	566	339	6.8	18.5	25.0	4.6	2.3	1	5.9	1.8	2567	2137	95.7	9.0	7						
307008	1/Jan 16:48		25.1	1014	507	305	6.8	321	20.4	25.1	1112	556	334	6.8	18.4	25.0	4.6	2.3	1	5.9	1.8	2568	2136	95.7	9.0	8						
307013	1/Jan 17: 3		24.7	1040	520	305	6.8	320	20.4	24.7	1120	560	336	6.8	18.9	24.6	4.8	2.4	1	6.7	1.5	2056	1712	95.7	7.2	16						
307013	1/Jan 17:18		24.9																													

ELEMENT/TESTED		FEED WATER PARAMETERS					BRINE STREAM PARAMETERS					PRODUCT WATER PARAMETERS					OTHER DATA										
Serial	Date	Time	Temp	Cond	TDS	CI-	ph	Inlet	Flow	Temp	Cond	TDS	CI-	ph	W Flow	Temp	Cond	TDS	Meas	CI	ph	P Flow	P Flow	P Flow	P Flow	Delta	
Number			deg C	uachts	ppa	ppa		psi	GPM	deg C	uachts	ppa	ppa		GPM	deg C	uachts	ppa	ppa				GPM	GPM	GPM	GPM	psi
307011	2/Jan	3:0	25.1	1051	526	305	7.0	320	20.31	25.1	1118	559	335	7.0	19.11	25.1	4.6	2.3	1	6.6	1.2	1762	14674	99.7	6.1	20	
307011	2/Jan	3:15	24.9	1049	524	305	7.0	320	20.31	24.9	1116	558	335	7.0	19.11	24.9	4.6	2.3	1	6.6	1.2	1753	14599	99.7	6.1	20	
307011	2/Jan	3:30	25.0	1048	524	305	7.0	321	20.31	25.0	1116	558	335	7.0	19.11	25.1	4.6	2.3	1	6.6	1.2	1748	14557	99.7	6.1	20	
307011	2/Jan	3:45	25.0	1050	525	305	7.0	321	20.31	25.0	1116	558	335	7.0	19.11	24.9	4.6	2.3	1	6.7	1.2	1746	14541	99.7	6.0	20	
307011	2/Jan	4:0	24.9	1046	524	305	7.0	321	20.31	24.9	1115	558	334	7.0	19.11	24.9	4.6	2.3	1	6.6	1.2	1751	14582	99.7	6.1	20	
307011	2/Jan	4:12	25.0	1048	524	305	7.0	320	20.31	25.0	1115	558	335	7.0	19.11	25.0	4.6	2.3	1	6.6	1.2	1753	14599	99.7	6.1	20	
307011	2/Jan	4:27	25.1	1032	516	305	7.0	321	20.31	25.1	1058	549	329	7.0	19.11	25.0	4.6	2.3	1	6.6	1.2	1750	14574	99.7	6.1	20	
307011	2/Jan	4:43	25.0	1046	523	305	7.0	321	20.31	25.0	1112	556	334	7.0	19.11	25.0	4.6	2.3	1	6.6	1.2	1752	14591	99.7	6.1	20	
307011	2/Jan	5:12	24.9	1049	524	305	7.0	321	20.31	24.9	1115	558	335	7.0	19.11	24.8	4.6	2.3	1	6.7	1.2	1749	14566	99.7	6.1	20	
307011	2/Jan	5:27	25.0	1046	523	305	7.0	320	20.31	25.0	1113	556	334	7.0	19.11	25.0	4.6	2.3	1	6.6	1.2	1748	14557	99.7	6.1	20	
307011	2/Jan	5:41	2.4	1003	502	305	7.0	320	20.31	2.4	1067	534	320	7.0	19.11	1.7	4.6	2.3	1	6.6	1.2	1756	14574	99.7	6.1	20	
307011	2/Jan	5:56	24.9	1025	512	305	7.0	320	20.31	24.9	1096	545	327	7.0	19.11	24.9	4.6	2.3	1	6.6	1.2	1753	14599	99.7	6.1	20	
307011	2/Jan	6:11	25.1	1022	511	305	7.0	319	20.31	25.1	1086	543	326	7.0	19.11	25.1	4.6	2.3	1	6.7	1.2	1750	14574	99.7	6.0	20	
307011	2/Jan	6:26	24.9	1023	512	305	7.0	319	20.31	24.9	1087	544	326	7.0	19.11	24.8	4.6	2.3	1	6.7	1.2	1752	14591	99.7	6.0	19	
307011	2/Jan	6:46	25.3	1015	508	305	7.0	320	20.31	25.3	1080	540	324	7.0	19.11	25.3	4.6	2.3	1	6.7	1.2	1743	14516	99.7	6.1	20	
307011	2/Jan	6:56	24.9	1023	512	305	7.0	322	20.31	24.9	1088	544	326	7.0	19.11	24.9	4.7	2.3	1	6.7	1.2	1750	14574	99.7	6.0	21	
307011	2/Jan	7:11	25.1	1026	513	305	7.0	321	20.31	25.1	1092	546	328	7.0	19.11	25.1	4.7	2.3	1	6.7	1.2	1751	14582	99.7	6.1	19	
307011	2/Jan	7:26	24.9	1037	518	305	7.0	321	20.31	24.9	1102	551	331	7.0	19.11	24.8	4.7	2.3	1	6.7	1.2	1753	14599	99.7	6.0	20	
307011	2/Jan	7:41	25.0	1022	511	305	7.0	321	20.31	25.0	1087	544	326	7.0	19.11	25.0	4.7	2.3	1	6.7	1.2	1749	14566	99.7	6.1	20	
307011	2/Jan	7:56	25.1	1004	502	305	7.0	320	20.31	25.1	1067	534	320	7.0	19.11	25.0	4.6	2.3	1	6.7	1.2	1752	14591	99.7	6.0	19	
307011	2/Jan	8:17	25.0	1013	506	305	7.0	321	20.31	25.0	1077	538	323	7.0	19.11	25.0	4.6	2.3	1	6.7	1.2	1746	14541	99.7	6.0	20	
307011	2/Jan	8:32	25.1	1008	504	305	7.0	320	20.31	25.1	1072	536	322	7.0	19.11	25.1	4.6	2.3	1	6.7	1.2	1751	14582	99.7	6.0	20	
307011	2/Jan	8:47	24.9	1018	509	305	7.0	321	20.31	24.9	1082	541	325	7.0	19.11	24.9	4.6	2.3	1	6.7	1.2	1747	14549	99.7	6.0	20	

ELEMENTS TESTED						FEED WATER PARAMETERS							BRINE STREAM PARAMETERS								FRUSTRUM WATER PARAMETERS									OTHER DATA			
Serial Date	Time	Inlet Temp	Cond	TDS	Cl-	pH	Inlet F Flow	GPM	deg C	Temp Cond	TDS	Cl-	pH	M Flow	GPM	deg C	Temp Cond	TDS	Cl-	pH	P Flow	GPM	F Flow	Flow	Cl-	Per.	Delta						
Number		: deg C	uoahs	ppm	ppm		psi			uoahs	ppm	ppm					uoahs	ppm	ppm					lb/day	Rej	Rec.	psi						
307012	2/Jan 12:1	18.9	970	485	291	6.2	323	20.3	16.9	969	484	291	6.2	18.9	18.7	4.7	2.4	1.6	5.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4						
307012	2/Jan 12:16	25.0	996	498	299	6.2	323	20.3	25.0	995	498	298	6.2	18.9	25.0	4.7	2.4	1.4	5.9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4						
307012	2/Jan 12:31	25.1	1017	508	305	6.2	323	20.3	25.1	1016	508	305	6.2	19.0	25.1	4.7	2.3	1.5	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 12:46	24.9	1001	500	300	6.2	323	20.3	24.9	1000	500	300	6.2	19.0	24.9	4.6	2.3	1.4	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 13:1	25.0	1003	502	301	6.2	323	20.3	25.0	1002	501	301	6.2	19.0	25.0	4.6	2.3	1.3	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 13:16	25.0	1002	501	301	6.3	323	20.3	25.0	1001	500	300	6.3	19.0	24.9	4.7	2.3	1.4	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 13:31	25.0	1003	502	301	6.3	322	20.3	25.0	1002	501	301	6.3	19.0	25.0	4.6	2.3	1.4	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 13:46	25.1	999	500	300	6.3	321	20.3	25.1	998	499	299	6.3	19.0	25.1	4.7	2.3	1.5	6.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 14:1	24.9	1010	505	303	6.3	322	20.3	24.9	1009	504	303	6.3	19.0	24.9	4.7	2.3	1.4	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 14:16	25.1	1024	512	307	6.3	321	20.3	25.1	1023	512	307	6.3	19.0	25.1	4.7	2.3	1.3	6.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 14:31	24.9	1001	500	300	6.3	322	20.3	24.9	1000	500	300	6.3	19.0	24.9	4.7	2.3	1.3	6.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 14:46	25.0	993	496	298	6.3	321	20.3	25.0	992	496	298	6.3	19.0	25.0	4.7	2.3	1.2	6.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 15:1	25.0	1003	502	301	6.4	325	20.3	25.0	1002	501	300	6.4	19.0	24.9	4.6	2.3	1.3	6.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 15:16	24.9	1001	500	300	6.4	323	20.3	24.9	1000	500	300	6.4	19.0	24.9	4.6	2.3	1.7	6.1	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3						
307012	2/Jan 15:31	25.1	1012	506	304	6.4	322	20.3	25.1	1011	506	303	6.4	19.0	25.1	4.7	2.4	1.3	6.1	1.3													

ELEMENT/TESTED										FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA		
Serial	Date	Time	Temp	Cond	TDS	Cl-	ph	Inlet F	Flow	Temp	Cond	TDS	Cl-	ph	W Flow	Temp	Cond	TDS	Cl-	ph	P Flow	P Flow	F Flow	Cl-	Per.	Delta																
Number			deg C	uachts	ppm	ppm		psi	gpm	deg C	uachts	ppm	ppm		gpm	deg C	uachts	ppm	ppm		gpm	gpm	lb/day	Fej	Rec.	psi																
307012	4/JAN	14:51	24.9	1001	500	300	6.4	323	20.31	24.9	1000	500	300	6.7	19.01	24.9	4.6	2.3	1.7	6.1	1.3	1362	16359	99.4	6.5	11																
307012	4/JAN	15: 6	25.1	1012	506	304	6.4	322	20.31	25.1	1011	506	303	6.7	19.01	25.1	4.6	2.3	1.3	6.1	1.3	1654	13741	97.6	6.5	10																
307012	4/JAN	15:21	24.9	1018	509	305	6.4	323	20.31	24.9	1017	508	305	6.7	19.01	24.9	4.6	2.3	1.2	6.1	1.3	1551	16242	99.6	6.4	10																
307012	4/JAN	15:36	25.0	1013	506	304	6.4	323	20.31	25.0	1012	506	304	6.7	19.01	25.0	4.5	2.2	1.1	6.1	1.3	1956	16190	99.6	6.5	11																
307012	4/JAN	15:51	25.1	997	498	299	6.4	322	20.31	25.1	996	498	299	6.7	19.01	25.0	4.6	2.3	1.1	6.1	1.3	1966	16373	99.6	6.4	10																
307012	4/JAN	16: 6	24.9	1031	516	309	6.4	324	20.31	24.9	1030	515	309	6.7	19.01	24.9	4.7	2.3	1.0	6.1	1.3	1560	16377	99.7	6.4	11																
307012	4/JAN	16:21	25.1	1012	506	304	6.4	322	20.31	25.1	1011	506	303	6.7	19.01	25.1	4.6	2.3	1.0	6.1	1.3	1957	16295	99.7	6.4	10																
307012	4/JAN	16:36	24.9	1005	502	302	6.4	323	20.31	24.9	1004	502	301	6.7	19.01	24.9	4.6	2.3	1.0	6.2	1.3	1552	16246	99.7	6.4	10																
307012	4/JAN	16:51	24.8	979	470	294	6.4	322	20.31	24.8	978	487	293	6.7	19.01	24.9	4.6	2.3	1.0	6.1	1.3	1761	16231	99.7	6.4	10																
307012	4/JAN	17: 6	24.9	1006	503	302	6.5	322	20.31	24.9	1005	502	301	6.7	19.01	24.9	4.6	2.3	1.1	6.2	1.3	1556	16250	99.6	6.4	10																
307012	4/JAN	17:21	25.1	997	498	299	6.5	323	20.31	25.1	996	498	299	6.7	19.01	25.1	4.6	2.3	1.1	6.2	1.3	1957	16298	99.6	6.4	10																
307012	4/JAN	17:36	24.9	1000	500	300	6.5	323	20.31	24.9	999	500	300	6.7	19.01	24.9	4.6	2.3	1.2	6.2	1.3	1562	16279	99.6	6.4	10																
307012	4/JAN	17:51	25.0	1002	501	301	6.5	323	20.31	25.0	1001	500	300	6.7	19.01	25.1	4.6	2.3	1.2	6.2	1.3	1924	16106	99.6	6.4	10																
307012	4/JAN	18: 6	24.9	997	498	299	6.5	323	20.31	24.9	996	498	299	6.7	19.01	24.9	4.6	2.3	1.3	6.2	1.3	1945	16165	99.6	6.4	10																
307012	4/JAN	18:21	25.0	992	496	298	6.5	322	20.31	25.0	991	496	297	6.6	19.01	25.0	4.5	2.3	1.2	6.2	1.3	1957	16256	99.6	6.4	9																
307012	4/JAN	18:36	25.0	100																																						

[illegible]

[illegible]

ELEMENT TESTED						FEED WATER PARAMETERS							IBRINE STREAM PARAMETERS								PRODUCT WATER PARAMETERS									OTHER DATA		
Serial Number	Date	Time	Temp	Cond	pH	TDS	Cl-	pH	Inlet F Flow	GPM	deg C	Cond	TDS	Cl-	pH	M Flow	GPM	deg C	Cond	TDS	Cl-	pH	P Flow	GPM	F Flow	Cl- Fer.	Delta psi					
307005	7/Jan	1:35		25.0	1009	504	151	6.4	319	20.31	25.0	1008	504	151	6.4	18.91	24.8	4.5	2.2	-7	6.2	1.4	2024	16939	99.6	7.0	13					
307005	7/Jan	1:50		25.0	1005	502	151	6.4	319	20.31	25.0	1004	502	151	6.4	18.91	24.9	4.5	2.2	-7	6.2	1.4	2044	17022	99.6	7.0	14					
307005	7/Jan	2: 5		25.1	1001	500	150	6.4	320	20.31	25.1	1000	500	150	6.4	18.91	25.0	4.5	2.2	-7	6.2	1.4	2056	17121	99.6	7.0	14					
307005	7/Jan	2:20		24.9	1009	504	151	6.4	319	20.31	24.9	1008	504	151	6.4	18.91	24.8	4.5	2.2	-7	6.2	1.4	2017	16564	99.6	7.0	13					
307005	7/Jan	2:35		25.0	1007	504	151	6.4	319	20.31	25.0	1006	503	151	6.4	18.91	24.9	4.5	2.2	-7	6.2	1.4	2037	16764	99.6	7.0	14					
307005	7/Jan	2:50		25.1	996	499	150	6.4	319	20.31	25.1	997	496	150	6.4	18.91	24.9	4.5	2.2	-7	6.1	1.4	2011	16514	99.6	6.9	14					
307005	7/Jan	3: 5		24.9	1003	504	151	6.4	319	20.31	24.9	1007	504	151	6.4	18.91	24.8	4.5	2.2	-7	6.1	1.4	2035	16743	99.6	7.0	13					
307005	7/Jan	3:20		25.1	1004	502	151	6.4	318	20.31	25.1	1003	502	150	6.4	18.91	25.0	4.5	2.2	-7	6.1	1.4	2035	16743	99.6	7.0	13					
307005	7/Jan	3:35		24.9	1008	504	151	6.4	319	20.31	24.9	1007	504	151	6.4	18.91	24.8	4.5	2.2	-7	6.2	1.4	2031	16714	99.6	6.9	14					
307005	7/Jan	3:50		25.0	1008	504	151	6.4	318	20.31	25.0	1007	504	151	6.4	18.91	24.9	4.5	2.2	-7	6.2	1.4	2030	16506	99.6	6.9	13					
307005	7/Jan	4: 5		25.1	993	496	149	6.4	318	20.31	25.1	992	496	149	6.4	18.91	24.9	4.5	2.2	-7	6.2	1.4	2033	16731	99.6	6.9	13					
307005	7/Jan	4:20		24.9	1007	504	151	6.5	320	20.31	24.9	1006	503	151	6.5	18.91	24.8	4.5	2.2	-7	6.2	1.4	2028	16861	99.6	6.9	14					
307005	7/Jan	4:35		25.1	1005	502	151	6.4	319	20.31	25.1	1003	502	150	6.4	18.91	25.0	4.5	2.2	-7	6.1	1.4	2041	16971	99.6	7.0	13					
307005	7/Jan	4:50		25.0	1010	505	152	6.5	319	20.31	25.0	1009	504	151	6.5	18.91	24.8	4.5	2.2	-7	6.2	1.4	2014	16773	99.6	6.9	14					
307005	7/Jan	5: 5		25.0	1009	504	151	6.4	319	20.31	25.0	1008	504	151	6.4	18.91	24.9	4.5	2.2	-7	6.1	1.4	2039	16706	99.6	6.9	14					
307005	7/Jan	5:20		25.1	991	496	149	6.4	319	20.31	25.1	990	495																			

ELEMENT/TESTED										FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA									
Serial Number	Date	Line	Temp	Cond	TDS	Cl-	ph	Inlet	Fflow	Temp	Cond	TDS	Cl-	ph	Mflow	Temp	Cond	TDS	Cl-	ph	GPH	Pflow	Pflow	Cl-	Percent Delta																								
			deg C	uachs	ppm	ppm		psi	GPM	deg C	uachs	ppm	ppm			GPM	deg C	uachs	ppm	ppm		GPM	lb/day	lb/day	Rej	Recov	Pst																						
307007	11/Jan 8:12		24.9	998	499	299	6.0	371	21.2	24.9	1079	540	374	6.0	19.6	25.1	11	6	3	5.6	1.6	2316	17288	98.9	7.6	8																							
307007	11/Jan 8:27		24.9	1019	510	306	6.0	369	21.1	24.9	1101	550	330	6.0	19.5	25.1	10	5	3	5.6	1.6	2280	18822	99.1	7.4	7																							
307007	11/Jan 8:42		24.8	1000	500	300	6.1	371	21.0	24.8	1078	539	324	6.1	19.5	24.9	8	4	2	5.5	1.5	221	18439	99.2	7.3	7																							
307007	11/Jan 8:57		25.0	1009	505	303	6.1	372	21.0	25.0	1088	544	326	6.1	19.5	25.1	8	4	2	5.7	1.5	2212	18422	99.2	7.3	6																							
307007	11/Jan 9:12		24.8	1002	501	300	6.2	370	21.0	24.8	1078	539	323	6.2	19.5	24.9	8	4	2	5.9	1.5	2165	18031	99.2	7.2	6																							
307007	11/Jan 9:27		24.9	1009	504	303	6.2	370	21.0	24.9	1085	542	325	6.2	19.5	25.0	8	4	2	6.0	1.5	214	17847	99.3	7.1	6																							
307007	11/Jan 9:39		24.9	1006	503	302	6.2	373	21.0	24.9	1082	541	325	6.2	19.5	25.0	7	4	2	6.0	1.5	213	17797	99.3	7.1	6																							
307007	11/Jan 9:57		24.9	1010	505	303	6.2	370	20.9	24.9	1086	543	326	6.2	19.4	25.0	7	4	2	6.0	1.5	212	17697	99.3	7.1	7																							
307007	11/Jan 10:12		24.9	1002	501	301	6.3	372	21.0	24.9	1078	539	323	6.3	19.5	25.1	7	4	2	6.0	1.5	214	17822	99.3	7.1	6																							
307007	11/Jan 11:29		23.9	1010	505	303	6.4	373	20.8	23.9	1082	541	324	6.4	19.4	25.0	7	4	2	6.2	1.4	2003	16731	99.3	6.7	8																							
307007	11/Jan 11:39		24.3	1006	503	302	6.4	371	20.9	24.3	1076	538	323	6.4	19.5	25.1	7	4	2	6.2	1.4	1972	16407	99.3	6.6	6																							
307007	11/Jan 12: 3		24.9	1005	503	302	6.3	371	20.7	24.9	1076	538	323	6.3	19.3	24.2	8	4	2	6.3	1.4	1977	16465	99.3	6.6	7																							
307007	11/Jan 12:18		24.9	999	499	300	6.3	370	20.6	24.9	1072	536	321	6.3	19.2	25.1	7	4	2	5.9	1.4	2037	16765	99.3	6.9	6																							
307007	13/Jan 16:12		24.9	1005	502	301	5.9	371	20.9	24.9	1070	535	321	5.9	19.6	25.1	9	5	3	3.8	1.3	1846	15374	99.1	6.1	6																							
307007	13/Jan 16:27		24.9	997	499	299	6.0	371	21.0	24.9	1061	531	318	6.0	19.7	24.9	8	4	2	3.8	1.3	1840	15324	99.2	6.1	8																							
307007	13/Jan 16:52		24.9	1002	501	300	6.0	371	21.1	24.9	1065	533	320	6.0	19.8	25.0	8	4	2	3																													

ELEMENTS / TESTED						REFINE STREAM PARAMETERS							PRODUCT WATER PARAMETERS								UNITK DATA							
Serial Number	Date	Inlet Temp	Cond	pH	Ci-	Inlet psi	GPM	Fllow : deg C	Temp	Cond uoohs	pH	Ci- ppa	Flow : deg C	Temp	Cond uoohs	pH	Ci- ppm	Flow : deg C	Temp	Cond uoohs	pH	Ci- ppm	GPM	Pflow	Pflow	Cl-	Ketov	Della
307003	25/Mar 17:16	: 25.6	1022	:	511	307	5.1	377	19.5:	25.6	1120	569	336	5.1	17.8:	25.1	10	5	3	4.1	1.7	2470	20737:	99.0	8.9	6		
307003	25/Mar 17:31	: 25.6	1022	:	511	306	5.1	377	19.6:	25.6	1119	560	336	5.1	17.9:	25.1	10	5	3	4.1	1.7	2486	20703:	99.0	8.9	6		
307003	25/Mar 17:46	: 25.6	1008	:	504	302	5.1	378	19.5:	25.6:	1105	552	331	5.1	17.8:	25.1	10	5	3	4.0	1.7	2492	20753:	99.0	8.9	7		
307003	25/Mar 18:1	: 25.7	1006	:	503	302	5.2	379	19.5:	25.7:	1103	551	331	5.2	17.8:	25.1	10	5	3	4.0	1.7	2493	20762:	99.0	8.9	8		
307003	25/Mar 18:16	: 25.6	999	:	500	300	5.2	378	19.5:	25.6:	1075	548	329	5.2	17.8:	25.1	10	5	3	4.0	1.7	2480	20654:	99.0	8.8	7		
307003	25/Mar 18:31	: 25.6	1007	:	503	302	5.2	373	19.6:	25.6	1101	556	330	5.2	17.9:	25.1	10	5	3	4.1	1.7	2455	20779:	99.0	8.6	2		
307003	25/Mar 18:46	: 25.6	1009	:	505	303	5.2	379	19.6:	25.6	1105	552	331	5.2	17.9:	25.1	10	5	3	4.1	1.7	2470	20670:	99.0	8.7	6		
307003	25/Mar 19:1	: 25.6	1010	:	505	303	5.2	379	19.6:	25.6	1105	553	332	5.2	17.9:	25.1	10	5	3	4.1	1.7	2465	20659:	99.0	8.7	8		
307003	25/Mar 19:16	: 25.7	1000	:	500	300	5.2	374	19.6:	25.7	1094	547	328	5.2	17.9:	25.1	10	5	3	4.1	1.7	2459	20629:	99.0	8.6	3		
307003	25/Mar 19:31	: 25.7	1010	:	505	303	5.2	379	19.6:	25.7	1106	553	332	5.2	17.9:	25.1	10	5	3	4.1	1.7	2462	20654:	99.0	8.7	8		
307003	25/Mar 19:46	: 25.7	1091	:	500	300	5.2	379	19.6:	25.7	1095	547	328	5.2	17.9:	25.1	10	5	3	4.1	1.7	2454	20457:	99.0	8.7	8		
307003	25/Mar 20:1	: 25.6	996	:	499	299	5.2	374	19.6:	25.6	1090	545	327	5.2	17.9:	25.0	10	5	3	4.1	1.7	2413	20656:	99.0	8.6	3		
307003	25/Mar 20:16	: 25.6	1003	:	501	301	5.2	379	19.6:	25.6	1097	549	329	5.2	17.9:	25.1	10	5	3	4.1	1.7	2443	20345:	99.0	8.7	8		
307003	25/Mar 20:31	: 25.6	1008	:	504	302	5.3	379	19.6:	25.6	1102	551	331	5.3	17.9:	25.0	10	5	3	4.1	1.7	2439	20312:	99.0	8.6	8		
307003	25/Mar 20:46	: 25.6	1003	:	502	301	5.3	379	19.6:	25.6	1097	549	329	5.3	17.9:	25.1	10	5	3	4.2	1.7	2439	20312:	99.0	8.6	8		
307003	25/Mar 21:1	: 25.6	1001	:	500	300	5.3	376	19.6:	25.6	1093	547	328	5.3	17.9:	25.1	10	5	3	4.2	1.7	2417	20129:	99.0	8.6			

ELEMENTS TESTED				FEED WATER PARAMETERS				BRINE STREAM PARAMETERS				PRODUCT WATER PARAMETERS				OTHER DATA			
Serial	Date	Time	Line	Temp	Cond	IDS	Cl-	ph	Inlet	Flow	Temp	Cond	IDS	Cl-	ph	Flow	Temp	Cond	IDS
Number				deg C	uach	ppm	ppm		psi	GPM	deg C	uach	ppm	ppm		GPM	deg C	uach	ppm
307003	26/Mar	21:16	1	25.6	1015	508	305	5.4	378	19.7	25.6	1088	554	332	5.4	18.0	25.0	8	4
307003	26/Mar	21:16	1	25.6	1007	503	302	5.4	378	19.5	25.6	1099	549	330	5.4	17.9	25.0	8	4
307003	26/Mar	21:31	1	25.7	1008	504	302	5.4	378	19.7	25.7	1099	550	330	5.4	18.0	25.1	8	4
307003	26/Mar	21:46	1	25.7	995	497	298	5.4	378	19.7	25.7	1085	543	326	5.4	18.0	25.1	8	4
307003	26/Mar	22:1	1	25.6	1005	502	301	5.4	378	19.6	25.6	1096	548	329	5.4	18.0	25.1	8	4
307003	26/Mar	22:16	1	25.6	1005	502	301	5.4	378	19.6	25.6	1096	548	329	5.4	18.0	25.0	8	4
307003	26/Mar	22:31	1	25.6	1007	504	302	5.4	378	19.6	25.6	1099	549	330	5.4	18.0	25.0	8	4
307003	26/Mar	22:46	1	25.7	1004	502	301	5.4	378	19.6	25.7	1096	548	329	5.4	17.9	25.1	8	4
307003	26/Mar	23:1	1	25.6	1007	503	302	5.4	378	19.6	25.6	1098	549	329	5.4	18.0	25.1	8	4
307003	26/Mar	23:16	1	25.6	1003	502	301	5.4	378	19.6	25.6	1094	547	328	5.4	18.0	25.1	8	4
307003	26/Mar	23:31	1	25.6	1004	502	301	5.4	378	19.6	25.6	1095	547	328	5.4	18.0	25.0	8	4
307003	26/Mar	23:46	1	25.6	1015	508	305	5.4	378	19.6	25.6	1107	554	332	5.4	18.0	25.1	8	4
307003	27/Mar	0:1	1	25.6	1008	504	302	5.4	377	19.6	25.6	1099	549	330	5.4	18.0	25.1	8	4
307003	27/Mar	0:16	1	25.6	998	499	299	5.4	378	19.6	25.6	1088	544	326	5.4	18.0	25.1	8	4
307003	27/Mar	0:31	1	25.6	1017	509	305	5.4	378	19.6	25.6	1109	555	333	5.4	18.0	25.0	8	4
307003	27/Mar	0:46	1	25.6	1013	506	304	5.4	378	19.6	25.6	1104	552	331	5.4	18.0	25.1	8	4
307003	27/Mar	1:1	1	25.7	1008	504	302	5.4	377	19.6	25.7	1099	550	330	5.4	18.0	25.1	8	4
307003	27/Mar	1:16	1	25.6	1000	500	300	5.4	377	19.5	25.6	1091	546	327	5.4	17.9	25.1	8	4
307003	27/Mar	1:31	1	25.6	1009	505	303	5.4	378	19.6	25.6	1100	550	330	5.4	18.0	25.1	8	4
307003	27/Mar	1:46	1	25.6	1012	506	304	5.4	378	19.6	25.6	1103	552	331	5.4	18.0	25.0	8	4
307003	27/Mar	2:1	1	25.6	1008	504	303	5.4	378	19.6	25.6	1100	550	330	5.4	18.0	25.0	8	4
307003	27/Mar	2:16	1	25.7	1003	502	301	5.4	378	19.6	25.7	1094	547	328	5.4	18.0	25.1	8	4
307003	27/Mar	2:31	1	25.6	1002	501	301	5.4	377	19.6	25.6	1093	546	328	5.4	18.0	25.1	8	4
307003	27/Mar	2:46	1	25.6	1003	502	301	5.4	378	19.6	25.6	1094	547	328	5.4	18.0	25.0	8	4
307003	27/Mar	3:1	1	25.6	1003	501	301	5.4	378	19.6	25.6	1094	547	328	5.4	18.0	25.0	8	4
307003	27/Mar	3:16	1	25.7	1013	506	304	5.4	377	19.6	25.7	1104	552	331	5.4	18.0	25.1	8	4
307003	27/Mar	3:31	1	25.7	1003	501	301	5.4	377	19.6	25.7	1093	547	328	5.4	18.0	25.1	8	4
307003	27/Mar	3:46	1	25.6	999	499	299	5.4	378	19.6	25.6	1089	544	327	5.4	18.0	25.1	8	4
307003	27/Mar	4:1	1	25.6	1014	507	304	5.4	378	19.6	25.6	1106	553	332	5.4	18.0	25.0	8	4
307003	27/Mar	4:16	1	25.6	1009	505	303	5.4	378	19.6	25.6	1100	550	330	5.4	18.0	25.0	8	4
307003	27/Mar	4:31	1	25.7	1006	503	302	5.4	378	19.6	25.7	1097	549	329	5.4	18.0	25.1	8	4
307003	27/Mar	4:46	1	25.6	1013	506	304	5.4	378	19.6	25.6	1104	552	331	5.4	18.0	25.1	8	4
307003	27/Mar	5:1	1	25.6	1010	505	303	5.4	378	19.6	25.6	1101	550	330	5.4	18.0	25.0	8	4
307003	27/Mar	5:16	1	25.6	1008	504	302	5.4	378	19.6	25.6	1099	549	330	5.4	18.0	25.0	8	4
307003	27/Mar	5:31	1	25.7	996	498	299	5.4	378	19.6	25.7	1086	543	326	5.4	18.0	25.1	8	4
307003	27/Mar	5:46	1	25.6	1010	505	303	5.4	378	19.6	25.6	1101	550	330	5.4	18.0	25.1	8	4
307003	27/Mar	6:1	1	25.6	1007	504	302	5.4	378	19.6	25.6	1098	549	329	5.4	18.0	25.0	8	4
307003	27/Mar	6:16	1	25.6	1017	509	305	5.4	378	19.6	25.6	1107	555	333	5.4	18.0	25.0	8	4
307003	27/Mar	6:31	1	25.7	1003	501	301	5.4	378	19.6	25.7	1094	547	328	5.4	18.0	25.1	8	4
307003	27/Mar	6:46	1	25.6	1000	500	300	5.4	378	19.6	25.6	1090	545	327	5.4	18.0	25.0	8	4
307003	27/Mar	7:1	1	25.6	1005	502	301	5.4	378	19.6	25.6	1095	547	328	5.4	18.0	25.0	8	4
307003	27/Mar	7:16	1	25.7	1005	502	301	5.4	378	19.6	25.7	1095	548	329	5.4	18.0	25.1	8	4
307003	27/Mar	7:31	1	25.7	1011	505	303	5.4	378	19.6	25.7	1102	551	331	5.4	18.0	25.1	8	4
307003	27/Mar	7:46	1	25.6	1010	505	303	5.4	378	19.6	25.6	1101	550	330	5.4	18.0	25.1	8	4

BRACKISH WATER TEST

ELEMENT /TESTED										FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Serial Number	Date	Time	Temp	Cond	TDS	Cl-	pH	Inlet Flow	psi	deg C	Temp	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow	Cond	TDS	Cl-	pH	Flow

[illegible]

[illegible]

ELEMENTARY TESTS										FIELD WATER PARAMETERS										TAPLINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA			
Serial Number	Date	Time	Temp	Cord	IOS	CI-	pH	Inlet PSI	Filow	Temp	Lond	IOS	CI-	pH	Milow	Temp	Cond	IOS	CI-	pH	Pfilow	Ffilow	GFM	BFD	16/day	1 Rej	Percent Delta																
Number			: deg C		ppm	ppm		psi	GPM	f deg C	uonhs	ppm	ppm		BPM	f deg C	uonhs	ppm	ppm																								
307014	3/Mar	11:27	25.1	9271	4635	3235	2.9	403	19.5	25.1	10060	5045	3521	2.9	17.9	25.0	83	42	22	5.0	1.6	2300	19154	99.3	8.2	8																	
307014	3/Mar	11:42	25.1	9361	4650	3246	2.9	403	19.5	25.1	10123	5061	3533	2.9	17.9	25.0	83	42	22	5.0	1.6	2299	19146	99.3	8.2	8																	
307014	3/Mar	11:57	25.2	9326	4663	3255	2.9	403	19.5	25.2	10151	5075	3543	2.9	17.9	25.1	83	41	22	5.0	1.6	2301	19163	99.3	8.2	8																	
307014	3/Mar	12:12	25.2	9264	4632	3233	2.9	401	19.6	25.2	10077	5037	3517	2.9	18.0	25.1	83	41	22	5.0	1.6	2297	19173	99.3	8.1	8																	
307014	3/Mar	12:27	25.1	9233	4617	3222	2.9	402	19.6	25.1	10041	5020	3504	2.9	18.0	25.0	82	41	22	5.0	1.6	2288	19054	99.3	8.1	8																	
307014	3/Mar	12:42	25.1	9299	4649	3245	2.9	403	19.5	25.1	10118	5059	3531	2.9	17.9	25.0	82	41	22	5.0	1.6	2282	19088	99.3	8.2	8																	
307014	3/Mar	12:57	25.2	9288	4644	3241	2.9	402	19.5	25.2	10107	5054	3527	2.9	17.9	25.1	82	41	22	5.0	1.6	2294	19164	99.3	8.2	6																	
307014	3/Mar	13:12	25.2	9244	4622	3226	2.9	402	19.5	25.2	10080	5030	3511	2.9	17.9	25.1	81	41	22	5.0	1.6	2276	19121	99.3	8.2	8																	
307014	3/Mar	13:27	25.1	9295	4648	3244	2.9	402	19.5	25.1	10113	5057	3530	2.9	17.9	25.0	81	41	22	5.0	1.6	2288	19054	99.3	8.2	8																	
307014	3/Mar	13:42	25.2	9311	4656	3250	2.9	402	19.5	25.2	10132	5066	3536	2.9	17.9	25.1	81	41	22	5.0	1.6	2253	19076	99.3	8.2	8																	
307014	3/Mar	13:57	25.2	9239	4619	3224	2.9	407	19.4	25.2	10061	5030	3511	2.9	17.8	25.1	81	41	22	5.0	1.6	2301	19163	99.3	8.2	9																	
307014	3/Mar	14:12	25.2	9314	4657	3251	2.9	402	19.5	25.2	10134	5067	3537	2.9	17.9	25.1	81	40	22	5.0	1.6	2289	19063	99.3	8.2	8																	
307014	3/Mar	14:27	25.2	9269	4634	3235	2.9	402	19.5	25.2	10064	5042	3519	2.9	17.9	25.1	81	41	22	5.0	1.6	2287	19046	99.3	8.2	8																	
307014	3/Mar	14:42	25.2	9327	4664	3255	2.9	403	19.5	25.2	10147	5074	3541	2.9	17.9	25.0	81	40	22	5.0	1.6	2285	19020	99.3	8.1	6																	
307014	3/Mar	14:57	25.2	9272	4636	3236	2.9	401	19.4	25.2	10081	5041	3518	2.9	17.8	25.1	81	41	22	5.0	1.6	2257	18756	99.3	8.1	9																	
307014	3/Mar	15:12	25.2	9316	4658	3251	2.9	402	19.6	25.2	10130	5065	3535	2.9	18.0	25.0	80	40	21	5.0	1.6	2283	19013	99.3	8.1	8																	
307014	3/Mar	15:27	25.2	9248	4624	3227	2.9	402	19.5	25.2	10059	5030	3511	2.9	17.9	25.1	80	40	21	5.0	1.6	2282	19005	99.3	8.1	8																	
307014	3/Mar	15:42	25.2	9239	4619	3224	2.9	402	19.5	25.2	10051	5025	3508	2.9	17.9	25.1	80	40	21	5.0	1.6	2285	19020	99.3	8.1	8																	
307014	3/Mar	15:57	25.2	9336	4668	3258	2.9	402	19.6	25.2	10150	5075	3542	2.9	18.0	25.0	80	40	21	5.0	1.6	2280	18968	99.3	8.1	8																	
307010	3/Mar	16:12	25.2	9298	4649	3245	2.9	401	19.5	25.2	10171	5086	3550	2.9	17.6	25.1	82	41	22	4.8	1.7	2429	20227	96.3	8.7	7																	
307010	3/Mar	16:27	25.2	9309	4654	3249	2.9	402	19.5	25.2	10177	5089	3552	2.9	17.8	25.1	79	40	21	4.9	1.7	2413	20096	99.4	8.6	8																	
307010	3/Mar	16:42	25.2	9266	4633	3234	2.9	402	19.5	25.2	10132	5066	3536	2.9	17.8	25.1	78	39	21	4.9	1.7	2415	20112	99.4	8.6	8																	
307010	3/Mar	16:57	25.2	9338	4669	3259	3.0	403	19.5	25.2	10209	5104	3563	3.0	17.8	25.1	78	39	21	4.9	1.7	2410	20071	99.4	8.6	7																	
307010	3/Mar	17:12	25.1	9346	4673	3262	3.0	402	19.6	25.1	10209	5104	3563	3.0	17.9	25.0	77	36	21	4.9	1.7	2399	19979	99.4	8.5	7																	
307010	3/Mar	17:27	25.2	9288	4644	3242	3.0	402	19.5	25.2	10152	5076	3543	3.0	17.8	25.1	77	38	21	4.9	1.7	2405	20029	99.4	8.6	7																	

1

[illegible]

[illegible]

[illegible]

[illegible]

ELEMENT/TESTED		FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
Serial Number	Date Time	Inlet Temp	Cond	TDS	CJ-	pH	Inlet Flow	Temp	Cond	TDS	CJ-	pH	Mflow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S	CJ-	pH	Pilow Flow	Temp	Cond	I/S



ELEMENTS/TESTED										FEED WATER PARAMETERS										BINE SIREM PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA									
Serial	Date	line	Temp	Cond	IOS	Cl-	ph	Inlet	Flow	Temp	Cond	IOS	Cl-	ph	Kflow	Temp	Cond	IOS	Cl-	ph	Pflow	Flow	Cl-	Percent	Delta																								
Number			deg C	uohms	ppm	ppm		psi	GPM	deg C	uohms	ppm	ppm		GPM	deg C	uohms	ppm	ppm		GPM	lb/day	2 Ref	Recoy	psi																								
307005	12/Mar	11:36	25.4	9236	4618	2876	8.1	426	19.31	25.4	10463	5244	3268	8.1	17.01	25.1	94	47	24	9.2	2.3	3349	27891	99.2	12.1	7																							
307005	12/Mar	11:51	25.4	9213	4607	2888	8.1	425	19.31	25.4	10452	5226	3277	8.1	17.01	25.0	54	47	24	9.2	2.3	3325	27650	99.2	12.0	6																							
307005	12/Mar	12: 6	25.5	9280	4640	2909	8.1	425	19.31	25.5	10536	5268	3303	8.1	17.01	25.1	94	47	24	9.2	2.3	3344	27848	99.2	12.0	6																							
307005	12/Mar	12:21	25.5	9254	4627	2901	8.1	426	19.31	25.5	10504	5252	3278	8.1	17.01	25.0	93	47	23	9.2	2.3	3338	27795	99.2	12.0	7																							
307005	12/Mar	12:36	25.5	9219	4610	2890	8.1	424	19.31	25.5	10457	5248	3283	8.1	17.01	25.1	93	47	23	9.2	2.3	3329	27846	99.2	11.9	5																							
307005	12/Mar	12:51	25.5	9200	4606	2884	8.1	426	19.31	25.5	10446	5233	3275	8.1	17.01	25.1	93	46	23	9.2	2.3	3344	27846	99.2	12.0	7																							
307005	12/Mar	13: 6	25.5	9257	4629	2902	8.1	425	19.31	25.5	10503	5252	3293	8.1	17.01	25.1	93	46	23	9.2	2.3	3327	27707	99.2	12.0	6																							
307005	12/Mar	13:16	25.5	9262	4631	2904	8.0	427	19.31	25.5	10515	5257	3297	8.0	17.01	25.1	92	46	23	9.2	2.3	3341	27611	99.3	12.0	6																							
307005	12/Mar	13:36	25.5	9259	4630	2903	8.0	425	19.31	25.5	10504	5252	3293	8.0	17.01	25.1	92	46	23	9.2	2.3	3324	27661	99.3	12.0	6																							
307005	12/Mar	13:51	25.5	9248	4624	2899	8.0	426	19.31	25.5	10495	5248	3290	8.0	17.01	25.1	91	45	23	9.1	2.3	3332	27751	99.3	12.0	7																							
307005	12/Mar	14: 6	25.5	9255	4628	2902	8.0	426	19.31	25.5	10500	5250	3292	8.0	17.01	25.1	91	45	23	9.1	2.3	3325	27650	99.3	12.0	7																							
307005	12/Mar	14:21	25.5	9245	4622	2898	8.0	425	19.31	25.5	10485	5244	3268	8.0	17.01	25.1	90	45	23	9.1	2.3	3324	27651	99.3	12.0	6																							
307005	12/Mar	14:36	25.5	9184	4592	2879	8.0	426	19.31	25.5	10418	5229	3266	8.0	17.01	25.1	90	45	23	9.1	2.3	3320	27661	99.3	11.9	7																							
307005	12/Mar	14:51	25.5	9210	4605	2887	8.0	425	19.31	25.5	10444	5222	3274	8.0	17.01	25.1	90	45	23	9.1	2.3	3312	27595	99.3	11.9	6																							
307005	12/Mar	15: 6	25.5	9275	4638	2908	8.0	425	19.31	25.5	10522	5261	3299	8.0	17.01	25.1	90	45	23	9.1	2.3	3322	27664	99.3	12.0	6																							

ELEMENT/TESTED				FEED WATER PARAMETERS				ISLAND STREAM PARAMETERS				PRODUCT WATER PARAMETERS				OTHER DATA										
Serial Number	Date	Time	Cl- ppm	Temp deg C	Cond uohms	IDS ppm	ph	Inlet psi	Flow GPM	Temp deg C	Cond uohms	IDS ppm	Cl- ppm	ph	Pilow GPM	Pilow 10/day	Follow 10/day	Percent Recov	Delta psi							
307012	13/Mar	0:51	25.5	9265	4633	2905	7.4	426	19.31	25.5	10449	5224	3276	7.4	17.11	25.1	75	37	19	8.7	2.2	3171	26411	99.4	11.4	7
307012	13/Mar	1:16	25.5	9260	4630	2903	7.4	426	19.31	25.5	10442	5221	3274	7.4	17.11	25.1	74	37	19	8.7	2.2	3169	26393	99.4	11.4	7
307012	13/Mar	1:21	25.5	9239	4620	2897	7.4	425	19.41	25.5	10408	5204	3263	7.4	17.21	25.1	73	37	18	8.7	2.2	3160	26314	99.4	11.3	6
307012	13/Mar	1:36	25.6	9317	4659	2921	7.4	425	19.41	25.6	10494	5247	3290	7.4	17.21	25.1	73	36	18	8.7	2.2	3154	26271	99.4	11.3	6
307012	13/Mar	1:51	25.6	9282	4641	2910	7.4	426	19.41	25.6	10455	5237	3278	7.4	17.21	25.1	72	36	18	8.7	2.2	3155	26279	99.4	11.3	7
307012	13/Mar	2:16	25.5	9304	4652	2917	7.3	425	19.21	25.5	10489	5244	3288	7.3	17.01	25.1	72	36	18	8.6	2.2	3145	26192	99.4	11.3	6
307012	13/Mar	2:21	25.5	9237	4619	2856	7.3	426	19.31	25.5	10406	5203	3262	7.3	17.11	25.1	71	36	18	8.6	2.2	3143	26174	99.4	11.3	7
307012	13/Mar	2:36	25.6	9258	4629	2903	7.3	425	19.31	25.6	10426	5213	3269	7.3	17.11	25.1	71	35	18	8.6	2.2	3136	26113	99.4	11.3	6
307012	13/Mar	2:51	25.6	9266	4648	2914	7.3	425	19.31	25.6	10467	5234	3282	7.3	17.11	25.1	70	35	18	8.6	2.2	3130	26069	99.4	11.3	6
307012	13/Mar	3:16	25.5	9306	4653	2918	7.3	425	19.31	25.5	10473	5236	3283	7.3	17.11	25.1	70	35	18	8.6	2.2	3118	25964	99.4	11.2	7
307012	13/Mar	3:21	25.5	9286	4643	2911	7.3	426	19.31	25.5	10452	5226	3273	7.3	17.11	25.0	70	35	18	8.6	2.2	3121	25930	99.4	11.2	7
307012	13/Mar	3:36	25.5	9242	4621	2897	7.2	425	19.31	25.5	10398	5199	3269	7.2	17.11	25.1	70	35	18	8.5	2.2	3111	25911	99.4	11.2	6
307012	13/Mar	3:51	25.5	9253	4626	2901	7.2	426	19.31	25.5	10413	5207	3265	7.2	17.11	25.1	69	35	17	8.5	2.2	3118	25964	99.4	11.2	7
307012	13/Mar	4:16	25.5	9304	4652	2917	7.2	426	19.31	25.5	10470	5235	3282	7.2	17.11	25.1	69	34	17	8.5	2.2	3116	25946	99.4	11.2	7
307012	13/Mar	4:21	25.5	9338	4669	2928	7.2	426	19.31	25.5	10506	5253	3294	7.2	17.11	25.1	69	34	17	8.5	2.2	3109	25944	99.4	11.2	7
307012	13/Mar	4:36	25.5	9304	4652	2917	7.2	425	19.31	25.5	10463	5231	3280	7.2	17.11	25.1	68	34	17	8.5	2.2	3098	25979	99.4	11.1	6
307012	13/Mar	4:51	25.6	9320	4660	2922	7.2	426	19.31	25.6	10484	5242	3287	7.2	17.11	25.1	68	34	17	8.4	2.2	3105	25959	99.5	11.2	7
307012	13/Mar	5:16	25.6	9290	4645	2913	7.2	426	19.31	25.6	10446	5224	3276	7.2	17.11	25.1	67	34	17	8.4	2.2	3100	25815	99.5	11.2	7
307012	13/Mar	5:21	25.5	9300	4650	2916	7.2	425	19.31	25.5	10453	5227	3277	7.2	17.21	25.1	67	34	17	8.4	2.1	3086	25701	99.5	11.1	6
307012	13/Mar	5:36	25.5	9278	4639	2909	7.1	425	19.31	25.5	10429	5214	3269	7.1	17.21	25.1	67	33	17	8.4	2.1	3086	25701	99.5	11.1	6
307012	13/Mar	5:51	25.5	9231	4615	2894	7.1	427	19.31	25.5	10376	5189	3254	7.1	17.21	25.1	66	33	17	8.3	2.1	3090	25726	99.5	11.1	8
307012	13/Mar	6:16	25.5	9276	4638	2908	7.1	426	19.31	25.5	10424	5212	3268	7.1	17.21	25.1	66	33	17	8.3	2.1	3060	25649	99.5	11.1	7
307012	13/Mar	6:21	25.5	9210	4605	2887	7.1	426	19.31	25.5	10350	5175	3245	7.1	17.21	25.1	66	33	17	8.3	2.1	3030	25649	99.5	11.1	7
307012	13/Mar	6:36	25.5	9217	4608	2890	7.1	426	19.31	25.5	10355	5177	3246	7.1	17.21	25.1	66	33	17	8.3	2.1	3073	25561	99.5	11.1	7
307012	13/Mar	6:51	25.5	9258	4629	2903	7.1	425	19.31	25.5	10400	5200	3261	7.1	17.21	25.1	66	33	17	8.3	2.1	3071	25578	99.5	11.1	6
307012	13/Mar	7:16	25.5	9170	4585	2875	7.1	425	19.31	25.5	10299	5150	3229	7.1	17.21	25.1	65	33	16	8.2	2.1	3066	25535	99.5	11.0	6
307012	13/Mar	7:21	25.6	9206	4603	2886	7.1	425	19.31	25.6	10340	5170	3242	7.1	17.21	25.1	65	33	16	8.2	2.1	3068	25552	99.5	11.0	6
307012	13/Mar	7:36	25.5	9245	4623	2898	7.1	426	19.31	25.5	10381	5190	3254	7.1	17.21	25.1	65	32	16	8.2	2.1	3060	25482	99.5	11.0	7
307012	13/Mar	7:51	25.5	9216	4608	2869	7.1	426	19.31	25.5	10347	5174	3244	7.1	17.21	25.1	64	32	16	8.2	2.1	3058	25465	99.5	11.0	7
307012	13/Mar	8:16	25.5	9214	4607	2885	7.0	425	19.31	25.5	10345	5172	3243	7.0	17.21	25.1	64	32	16	8.2	2.1	3057	25456	99.5	11.0	6
307012	13/Mar	8:21	25.5	9183	4591	2879	7.0	426	19.31	25.5	10310	5155	3232	7.0	17.21	25.1	64	32	16	8.1	2.1	3058	25465	99.5	11.0	7

[illegible]

PRINTED IN U.S.A.

ELEMENT/TESTED				FEED WATER PARAMETERS					BRINE STREAM PARAMETERS					PRODUCT WATER PARAMETERS					OTHER DATA								
Serial Number	Date	Line		Temp	Cond	IDS	Cl-	ph	Inlet	Flow	Temp	Cond	IDS	Cl-	ph	Flow	Flow	Cl-	Percent Delta								
				deg C	uachs	ppm	ppm	psi	psi	gpm	deg C	uachs	ppm	ppm		gpm	GFD	lb/day	Recov								
307006	15/Mar	2:56		25.5	9174	4587	2876	2.6	426	19.61	25.5	9959	4980	3122	2.6	18.01	25.1	154	77	39	4.6	1.6	2260	18521	98.7	8.0	7
307006	15/Mar	3:11		25.6	9171	4585	2875	2.6	426	19.61	25.6	9954	4977	3121	2.6	18.01	25.1	151	76	38	4.6	1.6	2255	187601	98.7	8.0	7
307006	15/Mar	3:26		25.6	9157	4578	2871	2.6	425	19.61	25.6	9939	4969	3116	2.6	18.01	25.1	147	74	37	4.7	1.6	2253	187621	98.8	8.0	6
307006	15/Mar	3:41		25.5	9204	4602	2886	2.6	426	19.51	25.5	9969	4995	3132	2.6	17.91	25.1	145	72	36	4.7	1.6	2239	184461	98.8	8.0	7
307006	15/Mar	3:56		25.6	9216	4608	2889	2.6	426	19.51	25.6	10001	5000	3135	2.6	17.91	25.1	144	72	36	4.7	1.6	2235	188131	98.9	8.0	7
307006	15/Mar	4:11		25.6	9224	4612	2892	2.6	426	19.51	25.6	10007	5003	3137	2.6	18.01	25.1	142	71	36	4.7	1.5	2229	185611	98.8	7.9	7
307006	15/Mar	4:26		25.4	9203	4602	2885	2.4	426	19.51	25.4	9960	4950	3129	2.4	18.01	24.9	140	70	35	4.7	1.5	2216	184561	98.8	7.9	7
307006	15/Mar	4:41		25.6	9222	4611	2891	2.6	426	19.51	25.6	10002	5001	3136	2.6	18.01	25.1	139	69	35	4.7	1.5	2220	184911	98.6	7.9	7
307006	15/Mar	4:56		25.6	9211	4605	2888	2.6	426	19.51	25.6	9969	4995	3132	2.6	18.01	25.1	137	68	34	4.8	1.5	2218	184731	98.9	7.9	7
307006	15/Mar	5:14		25.6	9171	4586	2875	2.6	426	19.51	25.6	9943	4972	3117	2.6	18.01	25.1	135	68	34	4.6	1.5	2211	184121	98.9	7.9	7
307006	15/Mar	5:29		25.5	9180	4590	2878	2.6	426	19.51	25.5	9953	4976	3120	2.6	18.01	25.1	134	67	34	4.8	1.5	2210	184031	98.9	7.9	7
307006	15/Mar	5:44		25.6	9136	4565	2862	2.6	425	19.51	25.6	9857	4948	3103	2.6	18.01	25.1	132	66	33	4.8	1.5	2205	183591	98.9	7.9	6
307006	15/Mar	5:59		25.6	9159	4589	2871	2.6	425	19.51	25.6	9926	4963	3112	2.6	18.01	25.1	131	65	33	4.8	1.5	2199	183151	98.9	7.8	6
307006	15/Mar	6:14		25.6	9168	4599	2884	2.6	425	19.51	25.6	9968	4984	3125	2.6	18.01	25.1	129	65	32	4.8	1.5	2197	182561	98.9	7.6	6
307006	15/Mar	6:29		25.5	9232	4616	2890	2.6	426	19.61	25.5	9978	4999	3135	2.6	18.11	25.1	128	64	32	4.8	1.5	2191	182451	98.9	7.8	7
307006	15/Mar	6:44		25.6	9186	4593	2880	2.6	426	19.51	25.6	9953	4973	3120	2.6	18.01	25.1	126	63	32	4.8	1.5	2192	182541	98.9	7.8	7
307006	15/Mar	6:59		25.6	9227	4614	2893	2.6	426	19.51	25.6	9997	4999	3134	2.6	18.01	25.1	125	63	31	4.8	1.5	2191	182451	99.0	7.8	7
307006	15/Mar	7:14		25.6	9236	4618	2896	2.6	425	19.51	25.6	10006	5003	3137	2.6	18.01	25.1	125	62	31	4.8	1.5	2189	182281	99.0	7.8	6
307006	15/Mar	7:29		25.6	9200	4600	2884	2.6	425	19.51	25.6	9966	4983	3125	2.6	18.01	25.1	124	62	31	4.8	1.5	2187	182101	99.0	7.8	6
307006	15/Mar	7:44		25.5	9167	4563	2874	2.6	426	19.51	25.5	9926	4964	3113	2.6	18.01	25.1	123	61	31	4.8	1.5	2179	181491	99.0	7.8	7
307006	15/Mar	7:59		25.5	9186	4593	2880	2.6	426	19.51	25.5	9949	4975	3119	2.6	18.01	25.1	122	61	31	4.8	1.5	2180	181581	99.0	7.8	7

[illegible]

[illegible]

TREATED WATER PARAMETERS										TREATING WATER PARAMETERS										TREATING WATER PARAMETERS										
Serial	Date	Line	Inlet	Flow	Temp	Cond	105	CI-	ph	Inlet	Flow	Temp	Cond	105	CI-	ph	Inlet	Flow	Temp	Cond	105	CI-	ph	Inlet	Flow	Temp	Cond	105	CI-	ph
Water			psi	gpm	deg C	u/s	ppm	ppm		psi	gpm	deg C	u/s	ppm	ppm		psi	gpm	deg C	u/s	ppm	ppm		psi	gpm	deg C	u/s	ppm	ppm	
307001	16/Mar	15:34	3.5	425	19.5	23.7	1017	5607	3141	3.5	17.9	23.2	180	50	45	5.0	1.6	206	1918	50.5	8.2	6								
307001	16/Mar	15:47	3.5	426	19.6	24.8	1017	5074	3150	3.5	17.9	24.3	176	85	45	5.0	1.7	2192	1815	51.5	8.5	7								
307001	16/Mar	16:1	3.5	424	19.6	25.6	1018	5061	3149	3.5	17.9	25.1	178	89	45	5.0	1.7	2174	2028	52.5	8.6	5								
307001	16/Mar	16:19	3.5	426	19.6	25.5	1017	5051	3147	3.5	17.9	25.0	176	88	44	5.0	1.7	2415	2078	53.5	8.6	7								
307001	16/Mar	16:34	3.5	425	19.6	25.6	1016	5053	3149	3.5	17.9	25.1	174	87	44	5.0	1.7	2432	2021	53.6	8.6	6								
307001	16/Mar	16:49	3.5	426	19.6	25.5	1015	5076	3152	3.5	17.9	25.0	171	86	43	5.0	1.7	2427	2023	53.6	8.6	7								
307001	16/Mar	17:1	3.5	425	19.6	25.5	1016	5050	3148	3.5	17.9	25.0	170	85	43	5.0	1.7	2418	2018	53.6	8.6	6								
307001	16/Mar	17:19	3.5	425	19.6	25.5	1017	5056	3155	3.5	17.9	25.0	169	84	42	5.0	1.7	2418	2018	53.6	8.6	6								
307001	16/Mar	17:34	3.5	426	19.6	25.5	1016	5052	3166	3.5	17.9	25.0	168	84	42	5.0	1.7	2428	2017	53.6	8.6	7								
307001	16/Mar	17:49	3.6	426	19.5	25.6	1016	5030	3154	3.6	17.8	25.0	168	84	42	5.0	1.7	2423	2011	53.6	8.6	7								
307001	16/Mar	18:1	3.6	424	19.6	25.6	1011	5055	3170	3.6	17.9	25.1	165	84	42	5.0	1.7	2416	2016	53.6	8.6	5								
307001	16/Mar	18:19	3.6	426	19.6	25.6	1011	5055	3170	3.6	17.9	25.1	166	83	42	5.0	1.7	2426	2024	53.6	8.6	7								
307001	16/Mar	18:34	3.6	426	19.6	25.5	1017	5059	3143	3.6	17.9	25.0	165	83	41	5.0	1.7	2416	2018	53.6	8.6	7								
307001	16/Mar	18:49	3.6	426	19.6	25.5	1017	5055	3157	3.6	17.9	25.0	165	83	41	5.0	1.7	2414	2012	53.6	8.6	7								
307001	16/Mar	19:1	3.6	426	19.6	25.5	1016	5056	3170	3.6	17.9	25.1	165	82	41	5.0	1.7	2416	2020	53.6	8.6	7								
307001	16/Mar	19:19	3.6	425	19.6	25.6	1016	5036	3159	3.6	17.9	25.1	164	82	41	5.0	1.7	2417	2021	53.6	8.6	6								
307001	16/Mar	19:34	3.6	425	19.6	25.6	1016	5036	3145	3.6	17.9	25.1	163	81	41	5.0	1.7	2415	2024	53.6	8.5	6								
307001	16/Mar	19:49	3.6	426	19.6	25.5	1015	5055	3152	3.6	17.9	25.0	162	81	41	5.0	1.7													

[illegible]

[illegible]

SPEED WATER PARAMETERS										BRINE SILEX PARAMETERS										PRODUCT WATER PARAMETERS										OTHER DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Serial Date	Time	Temp	Cond	US	Cl-	ph	Inlet	Flow	GFM	Temp	Cond	US	Cl-	ph	Mflow	Flow	GFM	Flow	Flow	Cl-	ph	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow</

○

ELEMENTS TESTED		FEED WATER PARAMETERS					SPINE SIFON PARAMETERS					PRODUCT WATER PARAMETERS					OTHER DATA									
Serial Date	size	temp	Cond	TDS	Cl-	pH	Inlet	flow	temp	Cond	TDS	Cl-	pH	flow	temp	Cond	TDS	Cl-	pH	Pflow	Pflow	Fflow	Cl-	Percent Delta		
Numer		: deg C	usohs	ppm	ppm		psi	GPM	: deg C	uoahs	ppm	ppm		GPM	: deg C	uoahs	ppm	ppm		GPM	GPD	Lb/day	I Reg	Perov	psi	
307016	20/Mar	6:50	25.5	9351	4676	2932	6.0	431	19.51	25.5	10324	5167	3237	6.0	17.61	25.0	134	67	34	5.4	1.9	2681	22778:	98.9	9.5	7
307016	20/Mar	7: 5	25.6	9294	4647	2914	6.0	430	19.51	25.6	10361	5130	3717	6.0	17.61	25.1	133	66	33	5.4	1.9	2680	22319:	98.9	9.5	6
307016	20/Mar	7:20	25.6	9333	4666	2926	6.0	430	19.51	25.6	10304	5152	3230	6.0	17.61	25.1	131	65	33	5.4	1.9	2669	22319:	98.9	9.5	6
307016	20/Mar	7:35	25.6	9343	4671	2929	6.0	430	19.51	25.6	10313	5157	3233	6.0	17.61	25.1	129	64	32	5.4	1.9	2675	22735:	98.9	9.5	6
307016	20/Mar	7:5	25.5	9311	4656	2919	6.0	431	19.51	25.5	10274	5157	3221	6.0	17.61	25.0	127	63	32	5.4	1.9	2665	22157:	97.0	9.5	7
307018	20/Mar	8: 5	25.6	9268	4634	2906	6.0	430	19.51	25.6	10228	5114	3207	6.0	17.61	25.1	125	63	31	5.4	1.9	2667	22214:	97.0	9.5	6
307018	20/Mar	8:20	25.6	9260	4630	2903	6.0	430	19.51	25.6	10219	5109	3204	6.0	17.61	25.1	123	62	31	5.4	1.9	2666	22205:	99.0	9.5	6
307018	20/Mar	8:35	25.6	9329	4664	2925	6.0	431	19.51	25.6	11293	5146	3227	6.0	17.71	25.1	122	61	31	5.4	1.8	2661	22162:	99.0	9.5	7
307018	20/Mar	8:50	25.6	9340	4670	2928	6.0	431	19.51	25.6	10304	5152	3231	6.0	17.71	25.0	121	60	30	5.4	1.8	2659	22144:	99.0	9.5	7
307018	20/Mar	9: 5	25.5	9258	4627	2903	6.0	429	19.51	25.5	10205	5103	3199	6.0	17.71	25.0	120	60	30	5.4	1.8	2637	21560:	95.0	9.4	5
307018	20/Mar	10:20	25.6	9317	4659	2921	6.0	431	19.51	25.6	10274	5137	3221	6.0	17.71	25.1	114	57	29	5.4	1.8	2645	22036:	99.1	9.4	7
307018	20/Mar	10:35	25.5	9277	4639	2906	6.0	431	19.51	25.5	10276	5113	3206	6.0	17.71	25.0	113	56	28	5.4	1.8	2636	21951:	97.1	9.4	7
307018	20/Mar	10:50	25.6	9252	4626	2901	6.0	431	19.51	25.6	10200	5100	3198	6.0	17.71	25.1	112	56	28	5.4	1.8	2639	21978:	99.1	9.4	7
307018	20/Mar	11: 5	25.6	9313	4657	2920	6.0	431	19.51	25.6	10266	5133	3218	6.0	17.71	25.1	112	56	28	5.4	1.8	2635	21943:	99.1	9.4	7
307018	20/Mar	11:20	25.5	9313	4657	2920	6.0	431	19.51	25.5	10264	5132	3216	6.0	17.71	25.0	110	55	28	5.4	1.8	2631	21907:	99.1	9.4	7
307018	20/Mar	11:35	25.6	9266	4633	2905	6.0	430	19.51	25.6	10212	5106	3201	6.0	17.71	25.1	110	55	28	5.3	1.8	2628	21896:	99.1	9.4	6
307018	20/Mar	11:50	25.6	9333	4666	2926	6.0	431	19.51	25.6	10285	5143	3225	6.0	17.71	25.1	108	54	27	5.4	1.8	2627	21881:	99.1	9.4	7
307018	20/Mar	12: 5	25.5	9251	4645	2913	6.0	431	19.51	25.5	10238	5119	3210	6.0	17.71	25.0	107	54	27	5.4	1.8	2625	21864:	99.1	9.3	7
307018	20/Mar	12:20	25.6	9243	4622	2898	6.0	430	19.51	25.6	10186	5093	3193	6.0	17.71	25.1	107	53	27	5.4	1.6	2627	21681:	99.1	9.4	6
307018	20/Mar	12:35	25.6	9316	4658	2921	6.0	430	19.51	25.6	10265	5133	3216	6.0	17.71	25.1	106	53	27	5.4	1.8	2623	21846:	99.1	9.3	6
307018	20/Mar	12:50	25.6	9274	4637	2908	6.0	430	19.51	25.6	10217	5108	3203	6.0	17.71	25.0	104	52	26	5.4	1.8	2618	21802:	99.1	9.3	6
307018	20/Mar	13: 5	25.4	9375	4686	2939	6.0	431	19.51	25.4	10316	5158	3234	6.0	17.71	24.9	105	52	26	5.4	1.8	2588	21557:	99.1	9.2	7

ADDITIONAL FRESHWATER TEST DATA

ELEMENT TESTED						SPEED WATER PARAMETERS								CENTRAL STREAM PARAMETERS									PRODUCT WATER PARAMETERS							UPPER LIFT	
Serial Number	Date	Time	Temp	Cnd	HWS	CL- psi	ph	Inlet deg C	Flow deg C	Temp	Lond	TCS ppm	CL- ppm	pH	Mlow deg C	Cond ufms/cm	Total TDS ppm	THP deg C	Fllow deg C	GPM	Pflow GPD	Fllow Ft/min	CL- Revol	Percent Delta							
307003	25-Mar	17:16	25.6	1022	511	307	5.1	377	19.5	25.6	1113	569	336	5.1	17.8	25.1	10	5	3	4.1	1.7	2430	20737	99.0	8.9						
307003	25-Mar	17:31	25.6	1022	511	306	5.1	377	19.6	25.6	1119	560	336	5.1	17.9	25.1	10	5	3	4.1	1.7	2486	20703	99.0	8.8						
307003	25-Mar	17:46	25.6	1068	504	302	5.1	378	19.5	25.6	1105	552	331	5.1	17.8	25.1	10	5	3	4.0	1.7	2452	20752	99.0	8.9						
307003	25-Mar	18:1	25.7	1066	503	302	5.2	379	19.5	25.7	1103	551	331	5.2	17.8	25.1	10	5	3	4.0	1.7	2473	20762	99.0	8.9						
307003	25-Mar	18:16	25.6	999	500	300	5.2	378	19.5	25.6	1075	548	329	5.2	17.8	25.1	10	5	3	4.0	1.7	2480	20654	99.0	8.8						
307003	25-Mar	18:31	25.6	1067	503	302	5.2	373	19.6	25.6	1101	550	330	5.2	17.9	25.1	10	5	3	4.1	1.7	2435	20771	99.0	8.6						
307003	25-Mar	18:46	25.6	1009	505	303	5.2	379	19.6	25.6	1105	552	331	5.2	17.9	25.1	10	5	3	4.1	1.7	2470	20750	99.0	8.7						
307003	25-Mar	19:1	25.6	1010	505	303	5.2	379	19.6	25.6	1105	553	332	5.2	17.9	25.1	10	5	3	4.1	1.7	2465	20721	99.0	8.7						
307003	25-Mar	19:16	25.7	1060	500	300	5.2	374	19.6	25.7	1074	547	328	5.2	17.9	25.1	10	5	3	4.1	1.7	2479	20737	99.0	8.6						
307003	25-Mar	19:31	25.7	1010	505	303	5.2	379	19.6	25.7	1106	553	332	5.2	17.9	25.1	10	5	3	4.1	1.7	2462	20544	99.0	8.7						
307003	25-Mar	19:46	25.7	1001	500	300	5.2	379	19.6	25.7	1095	547	328	5.2	17.9	25.1	10	5	3	4.1	1.7	2454	20437	99.0	8.7						
307003	25-Mar	20:1	25.6	998	499	299	5.2	374	19.6	25.6	1090	545	327	5.2	17.9	25.0	10	5	3	4.1	1.7	2413	20654	99.0	8.6						
307003	25-Mar	20:16	25.6	1003	501	302	5.2	379	19.6	25.6	1077	549	329	5.2	17.9	25.1	10	5	3	4.1	1.7	2462	20741	99.0	8.7						
307003	25-Mar	20:31	25.6	1006	504	302	5.3	379	19.6	25.6	1102	551	331	5.3	17.9	25.0	10	5	3	4.1	1.7	2437	20712	99.0	8.6						
307003	25-Mar	20:46	25.6	1003	502	301	5.3	379	19.6	25.6	1097	549	329	5.3	17.9	25.1	10	5	3	4.2	1.7	2439	20712	99.0	8.6						
307003	25-Mar	21:1	25.6	1001	500	300	5.3	376	19.6	25.6	1083	547	328	5.3	17.9	25.1	10	5	3	4.2	1.7	2417	20712	99.0	8.6						
307003	25-Mar	21:16	25.6	1007	503	3																									

1-10-1

[illegible]

[illegible]

FURNITURE				SPEED WATER PARAMETERS				SEINE STREAM PARAMETERS				PRODUCT WATER PARAMETERS				WATER DATA			
Serial Number	Date	Time	Temp	Flow	Temp	Flow	Temp	Flow	Temp	Flow	Temp	Flow	Temp	Flow	Temp	Flow	Temp		
			°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C		
307005	20/Jan	20:11	25.0	51294	34777	21110	7.6	891	20.51	25.0	51246	34745	21079	7.6	19.01	24.0	674		
307006	20/Jan	20:39	24.9	51187	34705	21066	7.6	895	20.51	24.9	51139	34672	21046	7.6	19.01	23.9	673		
307007	20/Jan	20:54	25.0	51416	34680	21160	7.6	802	20.51	25.0	51366	34678	21149	7.6	19.01	24.0	675		
307008	20/Jan	21:09	25.0	51304	34784	21114	7.6	891	20.51	25.0	51256	34752	21074	7.6	19.01	24.0	675		
307009	20/Jan	21:24	25.0	51151	34680	21051	7.6	802	20.51	25.0	51103	34648	21031	7.6	19.01	24.0	676		
307010	20/Jan	21:39	24.9	51308	34787	21116	7.6	802	20.51	24.9	51260	34754	21076	7.6	19.01	23.9	671		
307011	20/Jan	21:54	25.0	51482	34905	21187	7.6	801	20.51	25.0	51434	34872	21167	7.6	19.01	24.0	674		
307012	20/Jan	22:09	25.0	51435	34873	21168	7.6	808	20.51	25.0	51387	34840	21148	7.6	19.01	24.1	676		
307013	20/Jan	22:24	25.0	51210	34720	21075	7.6	799	20.51	25.0	51162	34668	21056	7.6	19.01	24.0	674		
307014	20/Jan	22:39	25.0	51087	34637	21025	7.6	799	20.51	25.0	51039	34604	21005	7.6	19.01	24.0	670		
307015	20/Jan	22:54	25.0	51127	34684	21041	7.6	803	20.51	25.0	51076	34632	21022	7.6	19.01	24.0	666		
307016	20/Jan	23:09	25.0	51213	34722	21077	7.6	802	20.51	25.0	51165	34691	21055	7.6	19.01	24.0	652		
307017	20/Jan	23:24	24.9	51381	34826	21146	7.6	800	20.51	24.9	51336	34806	21127	7.6	19.01	23.9	632		
307018	20/Jan	23:39	25.1	51422	34884	21163	7.6	802	20.51	25.1	51377	34834	21144	7.6	19.01	24.1	634		
307019	20/Jan	23:54	25.0	51050	34612	21009	7.6	800	20.41	25.0	51005	34561	20971	7.6	19.01	24.0	632		
307020	20/Jan	00:11	25.1	51281	34769	21104	7.6	799	20.41	25.1	51231	34739	21086	7.6	19.01	24.1	639		
307021	20/Jan	00:26	24.9	51377	34834	21144	7.6	798	20.41	24.9	51329	34802	21125	7.6	19.01	23.9	647		
307022	20/Jan	00:41	25.0	51450	34883	21174	7.6	798	20.51	25.0	51405	34853	21156	7.6	19.01	24.0	639		
307023	20/Jan	00:56	25.0	51115	34656	21036	7.6	794	20.51	25.0	51063	34621	21015	7.6	19.01	24.0	726		
307024	20/Jan	01:11	25.0	51394	34845	21151	7.6	798	20.51	25.0	51344	34811	21130	7.6	19.01	24.0	709		
307025	20/Jan	01:26	25.1	51286	34772	21107	7.6	797	20.51	25.1	51237	34739	21066	7.6	19.01	24.1	695		
307026	20/Jan	01:41	25.0	51231	34735	21064	7.6												

ELEMENT / TESTED			FEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETER										OTHER DATA		
Serial	Date	Line	Inlet Temp	Cond	TDS	Cl-	pH	Inlet F Flow	GPM	psi	deg C	leap Cond	TDS	Cl-	pH	M Flow	GPM	psi	deg C	leap Cond	TDS	Cl-	pH	P Flow	GPM	F Flow	GPM	Per.	Delta						
Number			: deg C	uachns	ppm	ppm							uachns	ppm	ppm						uachns	ppm	ppm						Rec.	psi					
307008	21/Jan	12: 9	25.4	51399	34849	21153	7.5	790	20.61	25.4	51345	34812	21131	7.5	19.0:	24.4	704	352	214	8.2	1.6	2293	15076:	99.0	7.7	3									
307008	21/Jan	12: 24	25.5	51821	35135	21327	7.5	793	20.61	25.5	51767	35098	21305	7.5	19.0:	24.5	702	351	213	8.2	1.6	2292	15171:	99.0	7.8	6									
307008	21/Jan	12: 43	25.4	51785	35110	21312	7.5	791	20.61	25.4	51731	35074	21290	7.5	19.0:	24.4	678	349	212	8.2	1.6	2294	15104:	99.0	7.7	4									
307008	21/Jan	12: 58	25.3	51893	35183	21356	7.5	794	20.61	25.3	51840	35148	21335	7.5	19.0:	24.3	691	345	210	8.2	1.6	2291	15079:	99.0	7.7	7									
307008	21/Jan	13: 12	25.4	51166	34691	21057	7.5	795	20.61	25.4	51113	34655	21035	7.5	19.0:	24.4	690	345	209	8.2	1.6	2292	15058:	99.0	7.7	8									
307008	21/Jan	13: 30	25.3	51833	35143	21332	7.5	792	20.61	25.3	51781	35108	21310	7.5	19.0:	24.3	680	340	206	8.2	1.6	2294	15271:	99.0	7.7	5									
307008	21/Jan	13: 45	25.5	51848	35153	21338	7.5	794	20.61	25.5	51795	35117	21316	7.5	19.0:	24.5	691	346	210	8.2	1.6	2291	15079:	99.0	7.7	7									
307008	21/Jan	14: 0	25.2	51653	35021	21258	7.5	796	20.61	25.2	51601	34985	21236	7.5	19.0:	24.2	680	340	206	8.2	1.6	2295	15030:	99.0	7.7	9									
307008	21/Jan	14: 15	25.4	51999	35255	21400	7.5	792	20.61	25.4	51946	35219	21378	7.5	19.0:	24.4	681	340	207	8.2	1.6	2290	15071:	99.0	7.7	5									
307008	21/Jan	14: 30	25.4	51528	34936	21206	7.5	775	20.61	25.4	51476	34901	21185	7.5	19.0:	24.4	678	339	206	8.2	1.6	2286	15038:	99.0	7.7	8									
307008	21/Jan	14: 45	25.2	51818	35133	21325	7.5	794	20.61	25.2	51766	35067	21304	7.5	19.0:	24.2	677	339	206	8.2	1.6	2274	14978:	99.0	7.7	7									
307008	21/Jan	15: 11	25.5	51595	34981	21234	7.5	793	20.61	25.5	51541	34945	21211	7.5	19.0:	24.5	708	354	215	8.2	1.6	2255	14780:	99.0	7.6	6									
307008	21/Jan	15: 21	25.4	51492	34912	21191	7.5	795	20.61	25.4	51439	34876	21170	7.5	19.0:	24.4	698	349	212	8.2	1.6	2261	14639:	99.0	7.6	8									
307008	21/Jan	15: 34	25.4	51464	34893	21180	7.5	794	20.61	25.4	51411	34857	21158	7.5	19.0:	24.4	698	349	212	8.2	1.6	2259	14613:	99.0	7.6	7									
307008	21/Jan	15: 49	25.1	51492	34912	21191	7.5	794	20.61	25.1	51441	34877	21170	7.5	19.0:	24.3	681	339	206	8.2	1.6	2247	14713:	99.0	7.6	7									
307008	21/Jan	16: 4	25.3	51667	35030	21263	7.5	792	20.61	25.3	51615	34975	21242	7.5	19.0:	24.1	681	341	207	8.2	1.6	2263	15046:	99.0	7.6	5									
307008	21/Jan	16: 15	24.0	49353	33461	20311	7.5	788	20.31	24.0	49303	33427	20290	7.5	19.0:	23.0	663	331	201	8.1	1.5	2219	14480:	99.1	7.5	1									
307008	21/Jan	16: 47	25.2	51692	35047	21274	7.5	795	20.61	25.2	51641	35013	21253	7.5	19.0:	24.2	674	337	204	8.2	1.6	2248	14721:	99.0	7.6	8									
307008	21/Jan	17: 37	25.2	51929	35208	21371	7.5	796	20.31	25.2	51879	35174	21351	7.5	19.0:	24.2	670	335	203	8.2	1.5	2225	14530:	99.0	7.5	9									
307008	21/Jan	17: 52	25.1	52017	35268	21407	7.5	795	20.51	25.1	51967	35234	21397	7.5	19.0:	24.1	666	333	202	8.2	1.5	2229	14563:	99.0	7.5	8									
307008	21/Jan	18: 7	25.3	52314	35469	21530	7.5	795	20.61	25.3	52263	35434	21509	7.5	19.0:	24.3	672	336	204	8.2	1.6	2239	14646:	99.0	7.6	8									

PRINTED IN U.S.A.

FIELD WATER PARAMETERS				TEMPERATURE MEASUREMENTS				PRODUCT WATER ANALYSIS				ANALYST DATA			
Date	Time	Loc	U.S.	Temp	Flow	Pressure	PH	Temp	Flow	Pressure	PH	Temp	Flow	Pressure	PH
mm/dd/yyyy	hh:mm	lat/lon	ft	deg C	gpm	psi		deg C	gpm	psi		deg C	gpm	psi	
3/20/20	5:15:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:16:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:17:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:18:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:19:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:20:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:21:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:22:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:23:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:24:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:25:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:26:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:27:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:28:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:29:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:30:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:31:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:32:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:33:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:34:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:35:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:36:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:37:00	34.76	21049	7.6	808	19.51	25.0	58.243	39.557	24.011	7.6	18.11	25.4	712	35.6
3/20/20	5:38:00	34.76	21049	7.6	808	19.51									

[illegible]

[illegible]

[illegible]

[illegible]

PRINTED IN U.S.A.

ELEMENT/TESTED	SPEED WATER PARAMETERS					SEBINE SURFACE PARAMETERS					SPECIFIC WATER PARAMETERS								
	Serial Date	Time	Temp	Cond	10S	Cl-	ph	inlet	Flow	Temp	Cond	10S	Cl-	ph	Flow	Temp	Cond	10S	Cl-
Number			deg C	uohs	ppm	ppm		psi	GPM	deg C	uohs	ppm	ppm		GPM	deg C	uohs	ppm	ppm
307020 12/Feb 0:34			25.1	51091	34640	21026	7.0	802	19.4	25.1	54760	37133	22540	7.0	18.1	25.3	631	316	
307012 12/Feb 7:54			25.1	56256	38142	23152	7.0	802	19.4	25.1	60626	41139	24571	7.0	18.0	25.3	1285	643	
307012 12/Feb 8:20			25.0	56101	38037	23088	7.0	803	19.4	25.0	60500	41019	24879	7.0	18.0	25.2	1278	639	
307012 12/Feb 8:34			25.1	55120	37371	22684	6.9	801	19.5	25.1	59493	40340	24486	6.9	18.0	25.3	1234	617	
307012 12/Feb 8:44			25.1	54839	37181	22589	6.9	801	19.5	25.1	59185	40128	24357	6.9	18.0	25.2	1214	607	
307012 12/Feb 8:58			25.1	54803	37156	22554	6.9	801	19.5	25.1	59168	40130	24359	6.9	18.0	25.3	1191	596	
307012 12/Feb 9:13			25.1	54454	36920	22410	6.9	801	19.4	25.1	58847	39658	24218	6.9	17.9	25.3	1169	585	
307012 12/Feb 9:28			25.0	54272	36796	22335	6.9	802	19.4	25.0	58660	39785	24149	6.9	17.9	25.2	1145	572	
307012 12/Feb 9:43			25.0	54238	36773	22321	6.9	800	19.4	25.0	58645	39762	24135	6.9	17.9	25.2	1134	566	
307012 12/Feb 9:59			25.1	54128	36699	22276	6.9	802	19.4	25.1	58558	39702	24099	6.9	17.9	25.3	1124	562	
307012 12/Feb 10:14			25.1	54024	36628	22233	6.9	802	19.4	25.1	58446	39628	24054	6.9	17.9	25.3	1117	558	
307012 12/Feb 10:29			25.0	51	35152	21337	6.9	798	19.5	25.0	58267	38149	23157	6.9	17.9	25.2	1025	512	
307012 12/Feb 10:44			25.1	51478	34902	21186	6.9	801	19.4	25.1	56004	37971	23048	6.9	17.8	25.3	990	495	
307012 12/Feb 11:10			25.1	51374	34832	21143	6.9	801	19.4	25.1	55517	37911	23012	6.9	17.8	25.3	980	470	
307012 12/Feb 11:31			25.0	50889	34503	20943	6.9	801	19.4	25.0	55366	37538	22786	6.9	17.8	25.2	965	483	
307012 12/Feb 11:46			25.1	51135	34670	21044	6.9	803	19.4	25.1	55662	37739	22906	6.9	17.8	25.3	966	483	
307012 12/Feb 12:1			25.0	51152	34681	21051	6.9	804	19.4	25.0	55672	37745	22912	6.9	17.8	25.2	961	480	
307012 12/Feb 12:16			25.1	51159	34686	21054	6.9	803	19.4	25.1	55696	37767	22921	6.9	17.8	25.3	960	480	
307012 12/Feb 12:31			25.0	51117	34657	21037	6.9	803	19.4	25.0	55626	37715	22853	6.9	17.8	25.2	953	476	
307012 12/Feb 12:46			25.1	51157	34664	21054	6.9	802	19.4	25.1	55663	37753	22916	6.9	17.8	25.3	953	476	
307012 12/Feb 13:23			25.0	51099	34645	21030	6.9	802	19.4	25.0	55607	37762	22885	6.9	17.8	25.2	944	472	

11

100

[illegible]

April 6, 1957

[illegible]

[illegible]

RELEASED/TESTED			WEEK WATER PARAMETERS					DRAINAGE SYSTEM PARAMETERS										GROUND WATER PARAMETERS				
Serial	Date	Time	Temp	Cond	TDS	Cl-	pH	Inlet	Flow	Temp	Cond	TDS	Cl-	pH	Below	Free	Load					
Number			: deg C	: uS/cm	: ppb	: ppb		: psi	: GPM	: deg C	: uS/cm	: ppb			: GPM	: deg C	: uS/cm	: ppb				
3070010	20/02/20	23:49	25.0	51177	34658	21062	7.2	802	19.31	25.0	50526	37211	27783	7.2	18.01	25.1	638	347				
3070010	20/02/20	0: 4	25.1	51061	34619	21014	7.2	802	19.31	25.1	50519	37474	27212	7.2	18.01	25.2	751	352				
3070010	20/02/20	0:19	25.1	51248	34746	21071	7.2	802	19.31	25.1	50537	37561	27377	7.2	18.01	25.2	658	347				
3070010	20/02/20	0:34	25.1	51225	34733	21083	7.2	801	19.31	25.1	50554	37444	27375	7.2	17.61	25.2	914	467				
3070010	20/02/20	0:47	25.1	51245	34744	21093	7.2	799	19.31	25.1	50536	38131	27627	7.2	17.61	25.2	863	432				
3070010	20/02/20	1: 4	25.0	51176	34697	21061	7.2	802	19.41	25.0	50442	38061	27437	7.2	17.61	25.1	846	473				
3070010	20/02/20	1:19	25.1	51209	34725	21025	7.2	802	19.31	25.1	50411	38114	27577	7.2	17.61	25.2	843	421				
3070010	20/02/20	1:34	25.1	51320	34755	21121	7.2	802	19.41	25.1	50626	38152	27384	7.2	17.61	25.2	836	414				
3070010	20/02/20	1:49	25.0	51148	34678	21050	7.2	801	19.41	25.0	50413	38218	27317	7.2	17.61	25.1	816	408				
3070010	20/02/20	2: 4	25.1	51109	34652	21034	7.2	802	19.41	25.1	50552	38266	27351	7.2	17.61	25.2	834	439				
3070010	20/02/20	2:19	25.1	51089	34638	21026	7.2	802	19.41	25.1	50545	38200	27168	7.2	17.61	25.2	847	424				
3070010	20/02/20	2:34	25.1	51239	34761	21112	7.2	801	19.41	25.1	50616	38357	27377	7.2	17.61	25.2	816	419				
3070010	20/02/20	2:49	25.0	51082	34634	21023	7.2	803	19.41	25.0	50531	38181	27176	7.2	17.61	25.1	831	415				
3070010	20/02/20	3: 4	25.1	51177	34676	21082	7.2	801	19.41	25.1	50476	38357	27222	7.2	17.61	25.2	842	421				
3070010	20/02/20	3:19	25.1	51207	34716	21074	7.2	802	19.41	25.1	50456	38377	27374	7.2	17.61	25.2	835	418				
3070010	20/02/20	3:34	25.0	50885	34586	20983	7.2	803	19.41	25.0	50205	38407	27331	7.2	17.61	25.1	875	413				
3070010	20/02/20	3:46	25.1	51194	34710	21069	5.3	801	19.41	25.1	50419	38252	27319	5.3	17.61	25.2	830	415				
3070010	20/02/20	3:56	25.5	51340	34619	21129	7.2	801	19.41	25.5	50446	38407	27313	7.2	17.61	25.6	835	400				
3070010	20/02/20	4:11	26.3	51319	34794	21120	7.2	801	19.41	26.3	50765	38467	27362	7.2	17.51	26.4	863	422				
3070010	20/02/20	4:26	27.1	51419	34662	21161	7.2	804	19.41	27.1	50413	38455	27444	7.2	17.51	27.2	833	440				
3070010	20/02/20	4:41	27.9	51504	34620	21176	7.2	823	19.41	27.9	50747	38114	27506	7.2	17.41	27.3	838	434				
3070010	20/02/20	4:56	28.6	51595	34781	21234	7.2	832	19.41	28.6	51441	38445	27443	7.2	17.41	28.7	930	455				
3070010	20/02/20	5:11	28.3	51168	34651	21033	7.2	812	19.41	28.3	50609	38351	27406	7.2	17.41	28.4	868	413				
3070010	20/02/20	5:26	27.5	51152	34655	21043	7.2	812	19.41	27.5	50616	38450	27342	7.2	17.51	27.6	841	413				
3070010	20/02/20	5:41	26.8	51056	34636	21024	7.2	832	19.41	26.8	50549	38450	27372	7.2	17.51	26.9	814	417				
3070010	20/02/20	5:56	26.2	51117	34657	21037	7.2	801	19.41	26.2	50421	38474	27244	7.2	17.51	26.3	759	395				
3070010	20/02/20	6:11	25.7	51047	34610	21008	7.2	801	19.41	25.7	50299	38164	27166	7.2	17.61	25.8	771	356				
3070010	20/02/20	6:26	25.2	51112	34654	21035	7.2	834	19.41	25.2	50502	38173	27171	7.2	17.61	25.3	756	378				
3070010	20/02/20	6:48	25.0	51161	34687	21055	7.2	802	19.41	25.0	50319	38180	27135	7.2	17.61	25.1	745	333				
3070010	20/02/20	6:48	25.0	51045	34619	21007	7.2	802	19.41	25.0	50519	38591	27125	7.2	17.61	25.1	745	332				
3070010	20/02/20	7:18	25.1	51224	34730	21081	7.2	802	19.41	25.1	50402	38247	27217	7.2	17.61	25.2	747	374				
3070010	20/02/20	7:33	25.1	51324	34756	21122	7.2	804	19.41	25.1	50536	38351	27282	7.2	17.61	25.2	750	355				
3070010	20/02/20	7:57	25.0	51127	34664	21041	7.2	802	19.41	25.0	50275	38154	27160	7.2	17.61	25.1	748	374				
3070010	20/02/20	8:14	25.1	51614	34994	21242	7.2	801	19.41	25.1	50755	38454	27366	7.2	17.61	25.2	753	376				
3070010	20/02/20	8:32	25.3	51830	35141	21330	7.2	802	19.41	25.3	51028	38705	27494	7.2	17.61	25.4	955	493				
3070010	20/02/20	8:50	24.7	51827	35139	21329	7.2	802	19.41	24.7	50562	38623	27451	7.2	17.61	24.8	903	451				
3070010	20/02/20	9: 5	24.5	51879	35174	21351	7.2	802	19.41	24.5	51044	38676	27476	7.2	17.61	24.6	885	443				
3070010	20/02/20	9:20	24.7	51384	34826	21147	7.2	802	19.41	24.7	50516	38316	27297	7.2	17.61	24.8	817	448				
3070010	20/02/20	9:35	24.3	51429	34869	21165	7.2	801	19.41	24.3	50541	38353	27349	7.2	17.61	24.4	854	427				
3070010	20/02/20	9:50	24.8	51370	34826	21141	7.2	803	19.41	24.8	50571	38355	27382	7.2	17.61	24.9	865	433				
3070010	20/02/20	10: 5	24.8	51031	34599	21062	7.2	802	19.41	24.8	50216	38114	27155	7.2	17.61	24.9	802	426				
3070010	20/02/20	10:20	24.7	51517	34929	21202	7.2	801	19.41	24.7	50702	38444	27355	7.2	17.61	24.8	847	423				
3070010	20/02/20	10:35	24.6	51140	34673	21047	7.2	802	19.41	24.6	50706	38155	27160	7.2	17.61	24.7	858	419				
3070010	20/02/20	10:50	25.0	51205	34718	21074	7.2	802	19.41	25.0	50406	38244	27214	7.2	17.61	25.1	802	426				
3070010	20/02/20	11: 5	25.0	51297	34779	21111	7.2	802	19.41	25.0	50502	38368	27253	7.2	17.61	25.1	805	422				
3070010	20/02/20	11:20	24.9	51051	34640	21026	7.2	803	19.41	24.9	50526	38146	27154	7.2	17.61	25.0	817	419				
3070010	20/02/20	11:43	25.0	51258	34753	21095	7.2	801	19.41	25.0	50452	38275	27333	7.2	17.61	25.1	837	418				
3070010	20/02/20	12: 1	25.3	51112	34654	21035	7.2	802	19.41	25.3	50339	38198	27186	7.2	17.61	25.4	819	419				
3070010	20/02/20	12:18	25.7	51415	34859	21160	5.2	801	19.41	25.7	50665	38419	27320	5.2	17.61	25.8	858	429				
3070010	20/02/20	12:28	25.3	52132	35346	21455	7.2	802	19.41	25.3	51744	39212	27365	7.2	17.61	25.4	862	431				
3070010	20/02/20	12:43	25.3	51513	34753	21200	7.2	802	19.41	25.3	50740	38470	27351	7.2	17.61	25.4	846	423				
3070010	20/02/20	12:58	25.3	51206	34719	21074	7.2	803	19.41	25.3	50419	38352	27319	7.2	17.61	25.4	816	418				
3070010	20/02/20	13:13	25.3	51366	34840	21148	7.2	801	19.41	25.3	50623	38394	27365	7.2	17.61	25.4	833	417				

April 6, 1987

ELEMENT TESTED				FEED WATER PARAMETERS				HEAT EXCHANGER PARAMETERS				HEADOUT WATER PARAMETERS				TUBING DATA			
Serial	Date	Time	Temp	Cond	TDS	CI-	ph	Inlet	Flow	Temp	Cond	TDS	CI-	ph	Flow	Flow	Flow	Flow	Flow
Number			deg C	uachls	ppm	ppm	ppm	psi	gpm	deg C	uachls	ppm	ppm	ppm	gpm	gpm/day	gpm/day	gpm/day	gpm/day
307006	20/feb	13:20	25.3	51264	34757	21078	7.2	802	19.41	25.3	56517	36315	23273	7.2	17.61	25.4	831	415	232
307006	20/feb	13:43	25.3	51215	34724	21077	7.2	802	19.41	25.3	56457	36278	23235	7.2	17.61	25.4	865	403	244
307006	20/feb	14: 3	25.3	51158	34695	21054	7.2	802	19.41	25.3	56363	36214	23196	7.2	17.61	25.4	879	415	252
307006	20/feb	14:23	25.2	51359	34601	21174	7.2	801	19.41	25.2	56342	36156	23270	7.2	17.61	25.3	873	417	253
307006	20/feb	14:53	25.2	51268	34760	21099	7.2	802	19.41	25.2	56403	36295	23245	7.2	17.61	25.3	816	408	249
307006	20/feb	15: 8	25.1	51057	34617	21012	7.2	801	19.41	25.1	56335	36202	23143	7.2	17.61	25.2	871	410	249
307006	20/feb	15:23	25.2	51473	34899	21184	7.2	802	19.41	25.2	56459	36442	23334	7.2	17.61	25.3	836	415	257
307006	20/feb	15:38	25.1	51215	34724	21077	7.2	803	19.41	25.1	56415	36435	23217	7.2	17.61	25.2	872	411	256
307006	20/feb	16: 3	25.2	51055	34622	21016	7.2	801	19.41	25.2	56251	36136	23150	7.2	17.61	25.3	833	412	256
307006	20/feb	16:18	25.2	51495	34914	21193	7.2	801	19.41	25.2	56478	36258	23223	7.2	17.61	25.3	870	410	249
307006	20/feb	16:38	25.1	51501	34918	21195	7.2	802	19.41	25.1	56399	36184	23348	7.2	17.61	25.3	815	410	249
307006	20/feb	17: 8	25.2	51660	35026	21261	7.3	801	19.41	25.2	56878	36855	23976	7.3	17.91	25.3	856	418	254
307006	20/feb	17:16	25.2	51517	34929	21202	7.2	802	19.41	25.2	56733	36782	23937	7.2	17.91	25.3	806	403	245
307006	20/feb	17:23	25.2	51607	34990	21239	7.2	802	19.41	25.2	56821	36847	23973	7.2	17.91	25.3	792	356	240
307006	20/feb	17:36	25.2	51658	35045	21272	7.2	801	19.41	25.2	56904	36903	24007	7.2	17.91	25.3	777	366	236
307006	20/feb	17:53	25.2	51793	35116	21315	7.2	801	19.41	25.2	56618	36960	24054	7.2	17.91	25.3	773	386	235
307006	20/feb	18: 8	25.2	51687	35045	21272	7.2	801	19.41	25.2	56903	36902	24007	7.2	17.91	25.3	775	368	235
307006	20/feb	18:33	25.3	51764	35056	21303	7.2	801	19.41	25.3	56985	36958	24040	7.2	17.91	25.4	774	387	235
307006	20/feb	18:53	25.2	51732	35074	21290	7.2	803	19.41	25.2	56903	36905	24068	7.2	17.91	25.3	762	361	231
307006	20/feb	19: 8	25.2	51736	35077	21292	7.2	802	19.41	25.2	56946	36933	24076	7.2	17.91	25.3	758	379	230
307006	20/feb	19:23	25.3	51802	35122	21319	7.2	801	19.41	25.3	56920	36962	24055	7.2	17.91	25.4	763	382	232
307006	20/feb	19:38	25.2	51677	35037	21268	7.2	802	19.41	25.2	56877	36864	23948	7.2	17.91	25.3	752	376	228
307006	20/feb	19:53	25.2	51790	35114	21314	7.2	801	19.41	25.2	56903	36970	24048	7.2	17.91	25.3	757	378	230
307006	20/feb	20: 8	25.2	51717	35064	21284	7.2	802	19.41	25.2	56913	36912	24012	7.2	17.91	25.3	751	376	228
307006	20/feb	20:23	25.1	51709	35059	21281	7.2	802	19.41	25.1	56913	36909	24011	7.2	17.91	25.2	753	376	229
307006	20/feb	20:38	25.3	51777	35105	21309	7.2	801	19.41	25.3	56983	36956	24040	7.2	17.91	25.4	752	376	228
307006	20/feb	20:53	25.2	51786	35113	21314	7.2	802	19.41	25.2	56995	36965	24045	7.2	17.91	25.3	747	374	227
307006	20/feb	21: 8	25.1	51679	35038	21268	7.2	801	19.41	25.1	56872	36861	23954	7.2	17.91	25.2	748	374	227
307006	20/feb	21:23	25.2	51697	35051	21276	7.2	802	19.41	25.2	56896	36897	24004	7.2	17.91	25.3	756	378	229
307006	20/feb	21:38	25.2	51826	35138	21329	7.2	801	19.41	25.2	56921	36928	24059	7.2	17.91	25.3	753	376	228
307006	20/feb	21:53	25.2	51700	35053	21277	7.2	801	19.41	25.2	56891	36894	24059	7.2	17.91	25.3	750	385	234
307006	20/feb	22: 8	25.2	51632	35142	21331	7.2	802	19.41	25.2	56938	36944	24067	7.2	17.91	25.3	770	385	234
307006	20/feb	22:23	25.2	51723	35068	21286	7.2	801	19.41	25.2	56917	36912	24013	7.2	17.91	25.3	772	385	234
307006	20/feb	22:38	25.1	51750	35073	21289	7.2	802	19.41	25.1	56918	36912	24013	7.2	17.91	25.2	766	383	233
307006	20/feb	22:53	25.1	51676	35036	21267	7.2	802	19.41	25.1	56856	36871	23988	7.2	17.91	25.2	770	385	234
307006	20/feb	23: 8	25.2	51812	35129	21323	7.2	801	19.41	25.2	56911	36916	24051	7.2	17.91	25.3	772	386	234
307006	20/feb	23:23	25.2	51754	35069	21299	7.2	802	19.41	25.2	56948	36953	24025	7.2	17.91	25.3	772	386	234
307006	20/feb	23:38	25.2	51785	35110	21312	7.2	801	19.41	25.2	56970	36974	24034	7.2	17.91	25.3	772	386	234
307006	20/feb	23:53	25.2	51949	35221	21379	7.2	801	19.41	25.2	56952	36952	24109	7.2	17.91	25.3	773	366	234
307006	20/feb	0: 8	25.2	51915	35201	21367	7.2	802	19.41	25.2	56918	36918	24095	7.2	17.91	25.3	770	385	234
307006	20/feb	0:23	25.2	51831	35141	21331	7.2	802	19.41	25.2	56925	36925	24057	7.2	17.91	25.3	776	368	235

[illegible]

[illegible]

[illegible]

SPEED WATER PARAMETERS										BRINE STREAM PARAMETERS										PRODUCT WATER PARAMETERS										DISHK DATA																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Serial	Date	Time	Temp	Cond	TDS	Cl-	pH	Inlet	psi	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS	Cl-	pH	GFM	Fflow	leap	Cond	TDS